

# AMB-8059 First Use A quick step by step guide





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### **Software installation**

The software must always be installed and used as Administrator. To do this:

		Apri	
		Enable/Disable Digital Signature Icons	
	0	Esegui come amministratore 🔫	-
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- Highlight the icon 8059 NSTS setup with one click of the mouse, then push the right button and from the menu choose the third voice from the top "RUN as administrator"

Proprieta - 00	J353W-02							
Sicurezza	Dettagli Versioni precedenti							
Generale	Collegamento Compatibilità							
₽ 8059SW-02								
Tipo:	Applicazione							
Percorso:	8059NSTS							
Destinazione:	\Program Files (x86)\\8059NSTS\\8059NSTS.exe"							
Da: Tasti di scelta	"C:\Program Files (x86)\8059NSTS"							
rapida:								
Esegui:	Finestra normale 🔹							
Commento:								
Apri percor	rso file Cambia icona Avanzate							

- After the installation, go on the icon of the 8061 NSTS and after highlighting it, always with the right button of the mouse, choose the voice "property", it should be the last one of the menu.

In the new window you have to choose the card called "compatibility"



🙊 Proprietà - 8059S	W-02	<b>x</b>					
Sicurezza	Dettagli	Versioni precedenti					
Generale	Collegamento	Compatibilità					
Se il programma funzionava correttamente con una versione precedente di Windows, mentre ora si incontrano dei problemi, selezionare la modalità di compatibilità che corrisponde a quella della versione precedente.							
Suggerimenti per	la scelta delle impos	stazioni					
- Modalità compatib	vilità						
Esegui il prog	jramma in modalità con	npatibilità per:					
Windows XP (S	ervice Pack 3)	T					
Impostazioni							
Esegui in mo	dalità 256 colori						
Esegui in riso	luzione 640 x 480						
Disattiva i ter	ni visivi						
Disattiva con	nposizione del desktop						
📃 Disabilita ridir	nensionamento schem	no per valori DPI alti					
Livello di privilegio							
Esegui questo programma come amministratore							
💮 Modifica imp	ostazioni per tutti gli ut	enti					
	ОК	Annulla Applica					

- Now check the box "run this software as administrator" and push the ok button.

At this point, every time the software runs, it will be in the mode Administrator.

Now it is time to connect the area monitor to your computer



# What happens when I do not use the option "Run as Administrator"?

From last Windows versions (after XP) every software, to be correctly used, must be installed with the option "Run as Administrator".

Also to be used, you have always to choose the option "Run as Administrator".

This is a security control introduced in Windows.

When you do not use this option, all program files are created in a parallel folder.

So with the option "Run as Administrator" the program folder used has the following path: C:\Program Files (x86)\(folder program)

Without this option the folder used is: C:\Users\(nome utente)\AppData\Local\VirtualStore\Program Files (x86)\(folder program)

In addition, on some computer, the folder AppData is not visible, it is hidden.

Without the correct installation and use the program could not find some important file and have some problems during the normal utilization



### **Connection to the computer**

The first connection with the area monitor must be done via cable (RS232 or USB).

- We can have 3 different possibilities:
- the computer has a RS232 port
- the computer does not have a RS232 port and you have to use the USB/RS232 adaptor
- use the USB connection

### The computer has a RS232 port

This is easiest situation. Normally the RS232 port is recognized as COM1.

### The computer does not have a RS232 port and you have to use the USB/RS232 adaptor

This is the converter normally given with area monitor. It should be automatically installed on your computer. In case you can install necessary driver manually that are in the CD.



### Use the USB connection

When the AMB-8059 is connected via USB, it is recognized by the computer as a new COM port called TI MSP430 USB (COMx), where x is the number associated to this specific port.

With the first connection it would be necessary to install its specific driver. Consult the user's manual, chapter 7.4.1.1 for additional information.

The driver is called MSP430\_CDC.inf and it is located in the same program folder, normally its path is C:\Program Files (x86)\8059NSTS



Now, it is time to decide in which way your AMB-8059 has to work.

With this area monitor you can work in Point-to Point mode or FTP mode, using the 3G modem or the Wi-Fi connection or also via optical fiber

**Point to Point** is a direct connection between the area monitor and the computer using the modem, the Wi-Fi or the optical fiber. The Point to Point with the Wi-Fi can be done directly, only in case the area monitor and the computer are under the same Wi-Fi network, or through a router.

In case of modem connection, you need a PC modem, a SIM card in the area monitor modem and another SIM car for the PC modem but only if it is GSM. Beware, the SIM card for this way of communication need to be specifically enabled for CSD communication mode. This kind of specific SIM card is normally called M2M Machine to Machine. Make sure the PIN code of the SIM card in use has been removed.





**FTP** means File Transfer Protocol, in this mode there is no direct connection between the area monitor and the computer. The area monitor will send all data on a FTP server where they lies up to the user will use the software to download them.

To work in this mode you need a FTP server and then choose between a modem connection or Wi-Fi connection.

In case of modem connection you need a SIM card in the area monitor modem with an internet data subscription. Make sure the PIN code of the SIM card in use has been removed.

In case of Wi-Fi connection, especially with free networks, be sure that the access has always the same password. The area monitor is able to support up WPA2-PSK protocol.

As default every monitor station is set on Wi-Fi communication FTP.





### The software 8059-SW02

Connect the area monitor to the computer and launch the software.

In the first window you can see the button change with the indication of port you are using to communicate with he area monitor.

As default it is set on the first available COM port of your computer.

Press it in case you need to change the port.

8059SW-02
Safety Test Solutions®
an 3 Communications Company
Communication
Change COMM 1
Release 1.20 (February 2017)

Leave the check on the COMM and from the drop down menu choose the connection you are using with the area monitor. Remember that in case you are using an USB/RS232 adaptor it is normally indicated as "Prolific USB-to-Serial COMM Port (COMx)".

In this example we are using USB connection that is normally indicated as "TI MSP430 USB (COMx)". Sections below this menu are eplained in the user manual

🔄. Communicatio	n		_		X
	-				
Porta di comunic	azione (COM	1)			~
TI MSP430 USB Porta di comunic	(COM5) azione (COM	1)			5
Port	Address -	168	1	1	
Ethernet – O Port 5000	Address - 192	168	11	2	
				Exit	



Now the software will ask you to enter a Terminal Password.

The Terminal PASSWORD is used to prevent the improper use of the software by non admitted personnel.

8061SW02		X
?	Terminal Password is Do you wish to set it	not set yet. NOW?
	Sì	No

If the answer is YES, a window will be opened where it is possible to enter the Terminal PASSWORD for the management of the Field Monitors. If the answer is NO, the program will allow to enter the password later. The User can enter any sequence of alphanumerical characters. We recommend to take a note of the Terminal PASSWORD entered.

It will be necessary to install the control software again in case the password is missing. After entering the Password with OK, the software will request confirmation of the password before registering it into the system.

For additional information or problems, consult the User's manual chapter 7



After entering the Terminal Password needed to ensure the secure management of the Field Monitors (Station identifier, telephone number, automatic downloads, automatic text file creation...), the software asks to enter a Setting PASSWORD which is needed to edit the parameter settings on the Field Monitors to be queried (alarm settings, storing rate, frequency bands, firmware upgrading...).

8061SW02		X
?	Setting Password is not set Do you wish to set it NOW	yet. ?
	<u></u>	No

Exactly for the previous passage, if the answer is YES, a window will be opened where it is possible to enter the Setting PASSWORD for the management of the Field Monitors. If the answer is NO, the program will allow to enter the password later. The User can enter any sequence of alphanumerical characters. We recommend to take a note of the setting PASSWORD entered.

For additional information or problems, consult the User's manual chapter 7



Every time you have to modify a field, the Terminal Password or the Setting Password will be requested by the software.

At the beginning, for the first setting operations, it would be helpful to leave these password blank, simply pressing enter on the keyboard.

Set a password only after all your area monitors will be correctly set, and just in case you need to have an higher security level



This is the main window of the software:

Point to Point								FTP	
# 1	Station Ide New8	ntifier (Name) 1059FTP		Last L Neve	<b>ink</b> er	Links 0/0	Alarm		OPEN
iperator Name -									Do not move file
									Add Station
									Open Log File
	May	May	у	2017		v		Data M	fanagement Data Exchange
Mon	May	Wed	y Thu	v 2017	Sat	▼ Sun	)	Data M	anagement
Mon 1 🔺	May Tue 2 🛦	Wed	y Thu 4 A	<ul> <li>✓ 2017</li> <li>Fri</li> <li>5 ▲</li> </ul>	Sat	▼ Sun 7 ▲	Week 18	Data M	anagement Data Exchange Data Export
Mon 1 ▲ 8 ▲	May Tue 2 A 9 A	Wed 3 A 10 A	y Thu 4 A 11 A	<ul> <li>2017</li> <li>Fri</li> <li>5 A</li> <li>12 A</li> </ul>	Sat 6 ▲ 13 ▲	✓ Sun 7 ▲ 14 ▲	Week 18 Week 19	_ Data M	fanagement Data Exchange Data Export
Mon 1 A 8 A 15 A	May Tue 2 A 9 A 16 A	Wed         3         A           10         A         17	y Thu 4 A 11 A 18 A	<ul> <li>✓ 2017</li> <li>Fri</li> <li>5 ▲</li> <li>12 ▲</li> <li>19 ▲</li> </ul>	Sat           6 ▲           13 ▲           20 ▲	✓ Sun 7 ▲ 14 ▲ 21 ▲	Week 18 Week 19 Week 20	_ Data M (	fanagement Data Exchange Data Export
Mon 1  A 8  A 15  22  A	May Tue 2 A 9 A 16 A 23 A	Wed           3 ▲           10 ▲           17 ▲           24 ▲	y Thu 4 ▲ 11 ▲ 18 ▲ 25 ▲	<ul> <li>✓ 2017</li> <li>Fri</li> <li>5 ▲</li> <li>12 ▲</li> <li>19 ▲</li> <li>26 ▲</li> </ul>	Sat       6 ▲       13 ▲       20 ▲       27 ▲	✓ Sun 7 ▲ 14 ▲ 21 ▲ 28 ▲	Week 18 Week 19 Week 20 Week 21		anagement Data Exchange Data Export
Mon           1 ▲           8 ▲           15 ▲           22 ▲           29 ▲	May 2 A 9 A 16 A 23 A 30 A	Wed         3         A           10 A         17 A         24 A           31 A         31 A         31 A	y 4 A 11 A 18 A 25 A 1 A	<ul> <li>2017</li> <li>Fri</li> <li>5 A</li> <li>12 A</li> <li>19 A</li> <li>26 A</li> <li>2 A</li> </ul>	Sat 6 A 13 A 20 A 27 A 3 A	✓ Sun 7 ▲ 14 ▲ 21 ▲ 28 ▲ 4 ▲	Week 18 Week 19 Week 20 Week 21 Week 22		Data Exchange Data Export
Mon           1 ▲           8 ▲           15 ▲           22 ▲           29 ▲           5 ▲	May Tue 2 A 9 A 16 A 23 A 30 A 6 A	Wed         3         A           10         A         10         A           24         A         31         A           7         A         A         A	y Thu 4 A 11 A 18 A 25 A 1 A 8 A	<ul> <li>2017</li> <li>Fri</li> <li>5 A</li> <li>12 A</li> <li>19 A</li> <li>26 A</li> <li>2 A</li> <li>9 A</li> </ul>	Set           6         ▲           13 ▲         20 ▲           27 ▲         3         ▲           10         ▲         ▲	▼ Sun 7 ▲ 14 ▲ 21 ▲ 28 ▲ 4 ▲ 11 ▲	Week 18 Week 19 Week 20 Week 21 Week 22 Week 23	-Data M ( ( D	fanagement Data Exchange Data Export

Place the cursor on the area monitor in the grid and click once, then click on button Data transfer settings.

#	Station Identifier (Name)			Last Link		Links	Alarm
1	1 New8059FTP			Never		0/0	
Edit	Station # 1		_				
Stat	ation Identifier (Name): New8059FTP			Address:	109.233.12	1.232	Remove Station
	S/N: 0123456789 (			User Name:	8057		
		(		Password:	pmmpass		Hide digits
CSch	neduled Call						Auto ASCII File
	Time	Generate Call		(	🖉 Data trai	nsfer settings	

The software will verify if the serial number matches or not. In case you can have the following window:

8059SW-02	x
Serial Number does not MATCH.	
ОК	



In this new window it is possible to see 6 different parts: Schedule, Communication, FTP, Mobile operator, Wi-Fi and Wi-Fi connection.

Data transfer settings S/N     FTP     Address:     User Name:     Password:     P	140WY60903 COMM 09.233.121.232 057 mmpass	Mobile operator Provider: User Name: Password:	omnitel.it
Schedule		Communication	wir:
WiFi SSID WLan:		WiFi Connection	
Password WLan: Remote IP Address: Port: AP Password:	000	Remote IP OFF	
Set Read			Exit

### Schedule

Here you have to set if the area monitor has to work in Point to Point or FTP mode.

#### Communication

Decide to use the internal 3G Modem or the internal Wi-Fi

#### FTP

These parameters depending on the FTP server you are using. As default, every Narda area monitor is set to work in FTP mode and the parameters you can find in this section are of our FTP server that can be used for preliminary test.

Beware that our FTP server is periodically cleaned do not use it in a definitive way.

#### Mobile operator

These parameters depending on the service provider of the used SIM. Provider is the APN (Access Point Name) User name used for GPRS connection Password used for GPRS connection

Some examples:

Italy: APN for a Vodafone SIM card is: web.omnitel.it User name and password are not required.

Greece: APN for a Cosmote SIM card is: internet User name and password are not required.



#### Wi-Fi

Here you have to set the Wi-Fi parameters. SSID WLan: the name of the wireless network you intend to use Password WLan: the password of that specific wireless network Remote IP address: this is the IP address of the area monitor, default 192.168.1.1 Port: the number of the port, used by the area monitor, default 5000 AP Password: this is the access point password, the password used by the area monitor, it is not mandatory

In this section, last 3 parameters (Remote IP address, Port and AP Password) are used only for the over ip connection. In case the Wi-Fi communication is just used in FTP mode you can leave these windows blank.

### Wi-Fi Connection

Direct AP: direct to the Access Point. In this case there is a direct communication between the area monitor and the computer

Remote IP: remote Internet Protocol. with these option you can choose to work in a point to point connection or also in FTP

Once all fields are filled, push the button Set.

The button Read is used to verify what parameters are recorded in an area monitor.



### Wi-Fi, Direct AP, Point to Point



This modality allows you to directly communicate with area monitor. The AMB-8059 becomes an Hotspot creating it own Wi-Fi network. The network will have the following name Narda\_AMB\_140WY60903To work in this way the area monitor hast to be set in this way:

Data transfer settings S/N	140WY60903 COMM	
FTP     1       Address:     1       User Name:     8       Password:     1	09.233.121.232 3057 ommpass	Mobile operator Provider: User Name: Password:
Schedule		Communication
Point to Point	FTP	Modem WiFi
WiFi SSID WLan: Password WLan: Remote IP Address: Port: AP Password:	92.168.1.115	WiFi Connection Direct AP Remote IP OFF
Set Read		Exit

Schedule: Point to Point

Communication: Wi-Fi

Wi-Fi: Remote Address, it must be 192.168.1.1

Port, the port used by the area monitor for the Wi-Fi communication, default 5000 AP Password, it is not mandatory, it is a protection password to assign to the station All other field can be left blank.

Press SET and then Exit



Close the program 8059-SW02. Using the Wi-Fi connection of your computer , look for the Wi-Fi network of your Area monitor and connect to it. and launch it again. In the first window press the button change:

Now check over IP and then complete the fields with the IP address 192.168.1.1 and the port number 5000

ſ	🖪. Communication	
	USB Serial Port (COM4)	
		ł
		1
	Ethernet –O	
	Address	
		ļ
	Exit	
		7



Now switch the main panel of the software into Point to Point mode and add a new station. It always better add and remove stations instead of change an existing one.

£ 8	8059SW-02		-							
ſ			Point to	Point			Υ		FTP	
	#	Station Ider MO	ntifier (Name) BILE		Telephone Numl 34866954123	ber L 17/0	Last Link 05/17 15.42	Links Alam 0/0 OnLo	n ock	CALL
	Operator Name —									Hang up
										Add Station
								/		Open Log File
									Data Manager	nent
		Мау	Мау	,	✓ 2017		*			Data Exchange
	Mon	Tue	Wed	Thu	Fri	Sat	Sun	]		Data Export
	1 🔺	2 🔺	3 🔺	4 🔺	5 🔺	6 🔺	7 🔺	Week 18		
	8 🔺	9 🔺	10 🛦	11 🔺	12 🛦	13🔺	14 🛦	Week 19		
	15▲	16 🛦	17 🛦	18 🛦	19 🛦	20 🔺	21 🛦	Week 20		
	22 🛦	23 🛦	24 🛦	25 🛦	26 🛦	27 🛦	28 🛦	Week 21		
	29 🛦	30 🛦	31 🛦	1 🔺	2 🔺	з 🔺	4 🔺	Week 22		
	5 🔺	6 🔺	7 🔺	8 🛦	9 🛦	10 🔺	11 🔺	Week 23	Direct Re	adings Post Setting Piggy Back
					Status				5	Exit

Now:

- Insert the Station Identifier: it is the name you decide to give to your monitor station. As default it is the serial number of the station.

- Insert the Telephone Number: even if the connection is Wi-Fi, the telephone number is necessary to add tha station in the grid. In this case ii can also be invented

- Insert the Device Password: this is the AP password you assigned at the monitor station, as default it is blank

For every field the computer will request the Terminal Password

# Station Identifier (Name)	Telephone Number	Last Link	Links	Alarm
1 NEW	34866954123	17/05/17 15.42	0/0	UnLock
2				
Edit Station # 1 Station Identifier (Name): NEW Telephone number: 34866954123		utomatic DownLoad PC Answering PC Calling	Remo	ve Station
Scheduled Call	evice PassWord		Hide dig Auto AS	iits :CII File d Events



Now your area monitor should be added to the list. Click once on its row and then press the button Call

æ	8059SW-02	and and a						
		Point to Point		FTP				
	#	Station Identifier (Name) MOBILE Now Station	Telephone Number 0123456789 012456789	Last Link 17/05/17 15.27	Links 0/0	Alarm • UnLock	CALL	
	C Operator Na		013430703		070			
							Hang up	[ ]
							Add Station	

Every time, the software will try to have a connection with the modem. Because of the area monitor is directly connected to the PC you will see the following window.



#### Press YES (SI)

Now the software will verify if the name you gave to the station is the same registered in the station's memory.

In case they are not matching the software will ask you if you want to change the name of the area monitor, stored in the internal memory, with that one you wrote in the grid, with the following window:





If you press YES the name inside the station will be changed.

This name it is just a label, the serial number of the area monitor will be always the same and cannot be changed.

If you press no, the software will ask you if you want to replace the name in the grid with that one stored in the area monitor.



The main window of the software show you all possible information about the area monitor and the probe.

Now passages to do are:

- push the button Enable Settings

- push the button Set Clock

- decide how many time and for how long the Wi-Fi has to be switched on in the frame Schedule SMS/ WiFi





The frame Schedule for SMS/WiFi functions in the following way:

- in the blank part near the written Tel#, you have to add the telephone number of the modem connected to the PC, this just in case you want the area monitor originates an automatic call to the computer

- in the part Time, you have to decide when the modem has to be switched ON

- in the part Stand By, you have to decide for how many quarters of hours, starting from the hours of switching ON, the modem has to stay in stand by

- in the part Every, you have to decide the interval, expressed in hours, from every switching ON

Example:

in the picture the modem will be switched ON at 13:45 and it will stay in stand by mode for 2 quarters of hours.

This means that for 30 minutes starting from the 13:45, the area monitor is ready to be called with the Wi-Fi

The area monitor will available to be contacted every 24 hours, for 30 minutes and always from the 13:45

Schedule for SMS/WiFi —	
Tel #	*
Time (HH:mm)	13 : 45
Stand By (Q) 02	Every (H) 24
Send REPORT	
OFF	ON

These are the basic operations to follow to work with the AMS-8061 in CSD mode

All additional information and explanations can be found in the user's manual.



### **BEWARE!**

Every time the Area monitor is switched OFF, and the battery pack disconnected from it, the internal clock has to be set. It is always better prepare the first installation on site with the help of a laptop or a tablet to verify that internal clock has the right hour and date



In this modality the area monitor will send all data to an FTP server where they lie up. The area monitor communicates to a router thorught the Wi-Fi network.

To work in this way the area monitor hast to be set in this way:

Data transfer settings S/N 140WY60903	COMM 4
Address:         109.233.121.232           User Name:         8057           Password:         pmmpass	Mobile operator Provider: User Name: Password:
C Schedule	Communication
Point to Point FTP	Modem WiFi
WiFi SSID WLan: Password WLan: Remote IP Address: 192.168.1.115 Port: 5000 AP Password:	WiFi Connection Direct AP Remote IP OFF
Set Read	Exit



Schedule: FTP Communication: Wi-Fi

Wi-Fi: SSID WLan is the name ot the Wi-Fi network you intend to use

Password, the password of the Wi-Fi network

Remote Address: the IP address you assign to the area monitor, default 192.168.1.115 Port: the port used by the area monitor for the Wi-Fi communication, default 5000 AP Password, it is not mandatory, it is a protection password to assign to the station

All other field can be left blank.

Press SET and then Exit



Every time you switch a AMB-8059 ON, it starts to work in Direct AP mode. After some minutes the area monitor will switch on the correct modality set in Data Transfer Settings. Due to it has unique IP address we have to add its MAC ddress in the router 's IP list.

The MAC address is written in the area monitor certification.

You have to enter in the router control panel you intend to use. Look for DHCP settings and the option "Add Manually".

This section is different for every router, every brand, every access point. We recommend to read instructions of the device you intend to use to have the Wi-Fi connection.

Once the area monitor we be recognized by the router, in the group of possible devices, you hav eto select it and specify the IP to use. The IP to use must match with the Remote Address you set in Data Transfer Settings window.

Normally, every area monitor, in addition to its MAC address, is normally recognized as WiFly Ezx

Also consider that a lot of fre Wi-Fi networks, request to change the user name and password after a specific time. We suggest to use only networks where this option is not acivated.



Once you set the FTP mode in the Data Transfer Settings window, you have to set the correct hours and date in the internal clock. To do this switch the main panel of the software into Point to Point mode and add a new station.

8059SW-02		6				γ			
#	Station Ide	ntifier (Name)	Point	Telephone Nu 348669541	mber 23 17/	Last Link 05/17 15.42	Links Alarm 0/0 UnLock	CALL	
Operator Name								Hang up	
								Open Log File	
	Мау	Ma	y	2017		*		Data Exchange	
Mon	May Tue	Wed	y Thu	✓ 2017	Sat	Sun		Data Exchange Data Export	
Mon 1 🔺	May Tue 2 🛦	Wed	y Thu 4 🛦	<ul> <li>✓ 2017</li> <li>Fri</li> <li>5 ▲</li> </ul>	Sat	▼ Sun 7 ▲	Week 18	Data Exchange Data Export	
Mon 1 A 8 A	May Tue 2 A 9 A	Wed 3 A 10 A	y Thu 4 & 11 &	<ul> <li>✓ 2017</li> <li>Fri</li> <li>5 ▲</li> <li>12 ▲</li> </ul>	Sat 6 ▲ 13 ▲	▼ Sun 7 ▲ 14 ▲	Week 18 Week 19	Data Exchange Data Export	
Mon 1	May Tue 2 A 9 A 16 A	Wed         3         A           10         A         17	y Thu 4 A 11 A 18 A	<ul> <li>✓ 2017</li> <li>Fri</li> <li>5 ▲</li> <li>12 ▲</li> <li>19 ▲</li> </ul>	Sat 6 ▲ 13 ▲ 20 ▲	▼ Sun 7 ▲ 14 ▲ 21 ▲	Week 18 Week 19 Week 20	Data Exchange Data Export	
Mon 1	May Tue 2 A 9 A 16 A 23 A	Wed           3 ▲           10 ▲           17 ▲           24 ▲	y Thu 4 A 11 A 18 A 25 A	<ul> <li>2017</li> <li>Fri</li> <li>5 A</li> <li>12 A</li> <li>19 A</li> <li>26 A</li> </ul>	Sat 6 A 13 A 20 A 27 A	<ul> <li>Sun</li> <li>7 A</li> <li>14 A</li> <li>21 A</li> <li>28 A</li> </ul>	Week 18           Week 19           Week 20           Week 21	Data Exchange	
Mon 1 8 15 22 29	May Tue 2 A 9 A 16 A 23 A 30 A	Wed         3         ▲           10 ▲         17 ▲         24 ▲           31 ▲         31 ▲         31 ▲	y Thu 4 ▲ 11 ▲ 18 ▲ 25 ▲ 1 ▲	<ul> <li>2017</li> <li>Fri</li> <li>5 A</li> <li>12 A</li> <li>19 A</li> <li>26 A</li> <li>2 A</li> </ul>	Sat         6 ▲           13 ▲         20 ▲           27 ▲         3 ▲	▼ Sun 7 ▲ 14 ▲ 21 ▲ 28 ▲ 4 ▲	Week 18           Week 19           Week 20           Week 21           Week 22	Data Exchange	

Now:

- Insert the Station Identifier: it is the name you decide to give to your monitor station. As default it is the serial number of the station.

- Insert the Telephone Number: it is the phone number associated to the SIM card in the area monitor

- Insert the Device Password: as default it is PASSPMM

For every field the computer will request the Terminal Password

# Station Identifier (Name)	Telephone Number	Last Link	Links	Alarm
1 NEW	34866954123	17/05/17 15.42	0/0	UnLock
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				
Edit Station # 1     Station Identifier (Name): NEW     Telephone number: 34866954123		utomatic DownLoad PC Answering PC Calling	Remo	ove Station
Scheduled Call	Device PassWord PASSPMM		Hide dig Auto As	gits SCII File d Events



Now your area monitor should be added to the list. Click once on its row and then press the button Call

8059SW-(	02						
	Point to Point					FTP	
# 1 2	Station Identifier (Name) MOBILE New Station	Telephone Number 0123456789 013456789	Last Link 17/05/17 15.27 / /	Links 0/0 0/0	Alarm • UnLock	CALL	$\supset$
Operator	Name					Hang up	
						Add Station	

Every time, the software will try to have a connection with the modem. Because of the area monitor is directly connected to the PC you will see the following window.



#### Press YES (SI)

Now the software will verify if the name you gave to the station is the same registered in the station's memory.

In case they are not matching the software will ask you if you want to change the name of the area monitor, stored in the internal memory, with that one you wrote in the grid, with the following window:





If you press YES the name inside the station will be changed.

This name it is just a label, the serial number of the area monitor will be always the same and cannot be changed.

If you press no, the software will ask you if you want to replace the name in the grid with that one stored in the area monitor.



The main window of the software show you all possible information about the area monitor and the probe.

Now passages to do are:

- push the button Enable Settings
- push the button Set Clock
- Hang and Exit

S/N 140WY60903)	Model and	serial number: stored in the	
ALAR	internal me	emory, cannot be changed	Get DATA
Last Field 0.166 V/m	UT Battely Section OFF ON OFF ON OFF ON 3.61V	Scheduled GSM on LOW Battery	Start Since Last Time Date & Time
Max Field ALARM Settings WARNING OFF ON OFF ON Threshold 5:00 V/m LABEL: the name written in the grid	OUT Probe Section IN OFF ON OFF ON OFF ON OFF ON CALL CALL CALL CALL CALL CALL CALL CAL	Disable  Schedule for MODEM  Tel # 1 4  Time (HH:mm) 13 : 46  Stand By (0) 01 Every (H) 01  Originate CALL  OFF ON	17/05/2017           15.15           Stop           O Up to N0W           ⊙ Date & Time
OFF ON OFF ON Threshold 6.00 V/m	Temperature OUT ON Temperature 27 °C	Schedule for SMS/WFi           Time (HH:mm)           13           (Stand By (0))           00           Every (H)           Frame           0FF	17/05/2017 16:15 e "Schedule for MODEM" Recall
GPS Latitude Longitude	RH: 31 %	Schedule for GPS Time (HH:mm) 12 : 00 Every (H) 24 - Exable	Get Recent Events Get All Events
NOTIFY ALARMs through Button "Set Clo MODEM SMS DFF ON OFF ON		Devce PassWord  Enable Change	CUpdate FimWare
Station Date & Time 17/05/17 16:15 Set Clock Synchronize on exiting	Read Station Conf.	Enable Setting	Modem/WiFi Off on Exit



Now turn again in the FTP mode in the main window and add a new station.

	Point to Point			FTP			
# 1	Station Identifier (Name) New8059FTP	Last Link Never	Link <sub>(None</sub> 0/0	Alarm	OPEN		
Station Identifier S/N: Scheduled Call – Time	lame): 140wY60900 I 140wY60900 I Generate Call	Address: 109 User Name: 805 Password: pm [	.233.121.232 7 npass Data transfer settings	Remove Station Hide digits Auto ASCII File	Do not move file Add Station		
					Open Log File		

Now:

- Insert the Station Identifier: it is the name you decide to give to your monitor station. As default it is the serial number of the station.

- Insert the S/N: it is the serial number of the station and it will correspond to the folder that will be created in your FTP server where you can find all data.

- Insert the Address: the IP of your FTP server
- Insert the User Name: the user name to enter in your FTP server
- Insert the password: the password to enter in your FTP server

For every field the computer will request the Terminal Password

Now your area monitor should be added to the list. Click once on its row and then press the button Open





The software starts to communicate with the FTP server. All communications between them is monitored by the window called Driver INET FTP

• MMB 8853 bit 1 Max               • MMB 8853 bit 1 Max               Feedboord	Driver INET FTP	
	lease 1.08 (December 2015) 140WY60	1900 rrication
O MIS 0052 / OWNED 732 / OWNED 742 / OWNED 744 / OWNED	Responses	commands
AMB 8059 as it was	000W/90922/ 000W/90793/ 000W/91238/ 000W/91238/ 000W/91028/ 000W/91028/ 000W/91028/ 000W/9102/ 000W/9102/ 000W/9102/ 000W/9102/ 000W/9102/ 000W/9102/ 000W/9102/ 000W/9103/ 000W/90902/ 000W/90902/ 000W/90902/ 000W/90903/ 000W/90903/ 000W/90903/ 000W/90903/ 000W/90903/ 000W/90903/ 000W/90903/ 000W/90903/ 000W/90903/ 000W/90903/ 000W/90903/ 000W/90903/ 000W/90903/ 000W/90903/ 000W/90903/ 000W/90903/ 000W/90903/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9000/ 000W/9000/ 000W/9000/ 000W/9000/ 000W/9000/ 000W/9000/ 000W/900/ 000W/9000/ 000W/900/ 000W/900/ 000W/900/	
AMB 8059 current settings Enable Setting Exact	<ul> <li>AMB 8059 as it was</li> <li>AMB 8059 current settings</li> </ul>	Set

The first time, the software will advise you that there is no folder on FTP server with that serial number and ask you to create it.

8059SW-02	X
S/N 140WY60900 does not Would you like to create it	exist. ?
Sì	No



Then will ask you if you want to use default settings. Choose YES for both windows



In this moment, in your FTP server, there should be a folder with the same serial number of your monitor station and inside there should be a file called creating.TXT



In the main window push the button Enable Settings and, after modify them push the button SET. For every changing the software will ask you the Setting Password

Date     Alam     Communication       Retrieve data from     Up to     State       Image: Date & Time     Image: Date & Time     Image: Date & Time       Image: Date & Time     Image: Date & Time     Image: Date & Time       Image: Date & Time     Image: Date & Time     Image: Date & Time       Image: Date & Time     Image: Date & Time     Image: Date & Time       Image: Date & Time     Image: Date & Time     Image: Date & Time       Image: Date & Time     Image: Date & Time     Image: Date & Time       Image: Date & Time     Image: Date & Time     Image: Date & Time       Image: Date & Time     Image: Date & Time     Image: Date & Time       Image: Date & Time     Image: Date & Time     Image: Date & Time       Image: Date & Time     Image: Date & Time     Image: Date & Time       Image: Date & Time     Image: Date & Time     Image: Date & Time       Image: Date & Time     Image: Date & Time     Image: Date & Time       Image: Date & Time     Image: Date & Time     Image: Date & Time       Image: Date & Time     Image: Date & Time     Image: Date & Time       Image: Date & Time     Image: Date & Time     Image: Date & Time       Image: Date & Time     Image: Date & Time     Image: Date & Time       Image: Date & Time     Image: Date & Time     Image: Date & Time	5 Station: 140WY60900	a face and			
Retrieve data from       Up to         Date & Time       30 second         18/05/2017       10/05/2017         1021       10/27         Set	Data	Ţ	Alarm	A A A A A A A A A A A A A A A A A A A	Communication
		Retieve data from Date & Time 18/05/2017 • 10.21 •	Up to O Date & Time 18/05/2017 10.27 Set	Rate Settings 30 second 1 minute 2 minute 6 6 minute 15 minute	
Refresh Save Enable Setting Ex		Re	efresh Save	Enal	ble Setting Exit



in the FTP server there is an additional file called 8059FLD.txt

G ftp://109.233.121.232/140WY60900/						
Organizza *						
Profesti Desitop Scifforme recenti Download	8059FLD.TXT	Creating.TXT				

In the software choose the section Communication and change the Schedule for SMS/WiFi settings accordingly to your work

8	🕅 Station: 140WY60900		
ſ	Data	Alarm	Communication
	Schedule for FTP Time (HH:mm) [12 Stand By (Quaters) Every (Hours)	: 05 Schedule for SMS/WiFi Time (HH:mm) 16 : 00 Stand By (Quarters) 01 Every (Hours) 24 Send REPORT Er	Jule for GPS Time (HH:mm) 16 : 00 Every (Hours) 24 nable
			6
		Refresh Save	Enable Setting Exit

The frame Schedule for SMS/WiFi works in the following way:

- in the part Time, you have to decide when the modem has to be switched ON and send data to the FTP server using the Wi-Fi connection

- in the part Stand By, you have to decide for how many quarters of hours, starting from the hours of switching ON, the WiFi has to try to send all data

- in the part Every, you have to decide the interval, expressed in hours, from every switching ON

#### Example:

in the picture the Wi-Fi will be switched ON at 16:00 and it will try to send all data to your FTP server for 1 quarters of hours.

This operation is repeated every 24 hours for a total of 1 connections every day at 16:00 o'clock



Once everything is correctly set, push the button Save.

Now on the FTP server there is a file called 8059.CFG taht is the configuration file you have just created and that will be used by the area monitor, during the first connection, to modify its settings accordingly to this file

G v htp://109.233.121	.232/140WY60900/	I			
Organizza #					
👷 Podeiti	▲ Nome	Dimensione	Тіро		
E Desitop	8059.CFG	1 KB	File CFG		
30 Roome recenti	8059FLD.TXT	1 KB	Documento di testo		
Download	Creating.TXT	1 KB	Documento di testo		
Prafaniti E Desittop E Roorse recenti Download	Nome 8059.CFG 8059FLD.TXT Creating.TXT	Dimensione 1 KB 1 KB 1 KB	Tipo File CFG Documento di testo Documento di testo		

Now we have to force the first connection between the Area Monitor and the FTP server.

This last operation has to be done via cable (RS232, USB, optical fiber), using Windows HyperTerminal, or any other software like it.

To allow communication between the Hyper Terminal software and the area monitor, it has to be set with following configuration:

Baud-rate:115200Data:8 bitParity:NoneStop:1 bitFlow control: None

In this way you have to send the command #BMSCGN\*



The connection should be completed within 5 minutes.

Here an example about what you should have on your FTP server:

Nome         Dimensione         Tipo         Ult           10_05_24_03_17D59         1 KB         File D59         24,           10_05_24_03_17TXT         1 KB         Documento di testo         24,           10_14_24_03_17TXT         1 KB         Documento di testo         24,           10_14_24_03_17TXT         6 KB         Documento di testo         24,           8059.CFG         0 KB         File CFG         03,           8059.set         1 KB         File SET         03,           8059FLD.TXT         1 KB         Documento di testo         03,           Creating.TXT         1 KB         Documento di testo         03,				
10_05_24_03_17D59       1 KB       File D59       24,         10_05_24_03_17TXT       1 KB       Documento di testo       24,         10_14_24_03_17D59       75 KB       File D59       03,         10_14_24_03_17TXT       6 KB       Documento di testo       03,         8059.CFG       0 KB       File CFG       03,         8059.set       1 KB       File SET       03,         8059FLD.TXT       1 KB       Documento di testo       03,         Creating.TXT       1 KB       Documento di testo       03,	Nome	Dimensione	Тіро	Ult
10_05_24_03_17TXT       1 KB       Documento di testo       24,         10_14_24_03_17D59       75 KB       File D59       03,         10_14_24_03_17TXT       6 KB       Documento di testo       03,         8059.CFG       0 KB       File CFG       03,         8059.set       1 KB       File SET       03,         8059FLD.TXT       1 KB       Documento di testo       03,         Creating.TXT       1 KB       Documento di testo       03,	10_05_24_03_17D59	1 KB	File D59	24,
10_14_24_03_17D59       75 KB       File D59       03,         10_14_24_03_17TXT       6 KB       Documento di testo       03,         8059.CFG       0 KB       File CFG       03,         8059.set       1 KB       File SET       03,         8059FLD.TXT       1 KB       Documento di testo       03,         Creating.TXT       1 KB       Documento di testo       24,	10_05_24_03_17TXT	1 KB	Documento di testo	24,
10_14_24_03_17TXT       6 KB       Documento di testo       03,         8059.CFG       0 KB       File CFG       03,         8059.set       1 KB       File SET       03,         8059FLD.TXT       1 KB       Documento di testo       03,         Creating.TXT       1 KB       Documento di testo       03,	10_14_24_03_17D59	75 KB	File D59	03,
8059.CFG         0 KB         File CFG         03,           8059.set         1 KB         File SET         03,           8059FLD.TXT         1 KB         Documento di testo         03,           Creating.TXT         1 KB         Documento di testo         24,	10_14_24_03_17TXT	6 KB	Documento di testo	03,
8059.set         1 KB         File SET         03,           8059FLD.TXT         1 KB         Documento di testo         03,           Creating.TXT         1 KB         Documento di testo         24,	8059.CFG	0 KB	File CFG	03,
8059FLD.TXT         1 KB         Documento di testo         03,           Creating.TXT         1 KB         Documento di testo         24,	8059.set	1 KB	File SET	03,
Creating.TXT 1 KB Documento di testo 24,	8059FLD.TXT	1 KB	Documento di testo	03,
	Creating.TXT	1 KB	Documento di testo	24/

As you can see the CFG file is now of 0 kB. This means that the area monitor has correctly taken new settings.

The AMB-8059 is now ready to work in total autonomy.



### **BEWARE!**

Every time the Area monitor is switched OFF, and the battery pack is disconnected from it, the internal clock has to be set. It is always better prepare the first installation on site with the help of a laptop or a tablet to verify that internal clock has the right hour and date



### **BEWARE!**

We strongly suggest to avoid free FTP storing services in general because of the many limitations and poor stability they exhibit. Overall features are not sufficient to guarantee a completely automatic system as Narda monitoring station.

Specifically, the free "royalwebhosting" service offers only passive FTP communication, whereas Narda monitoring station is designed for active FTP communications. The free "royalwebhosting" service has a maximum of 5 connections (per time). This limitation, more often than not, stops FTP communication in the middle of data upand down-load even on the same TCP session between the server and the same client. The free "royalwebhosting" service often exhibits very long reply times which trigger Narda monitoring station TO procedures.

To try Narda monitoring stations and setup a first working setup, we can provide you FTP space on our private server. However, for a future actual installation, you will need to arrange your own FTP server without the cited limitations.



### Modem, Point to Point



This modality allows you to directly communicate with area monitor. All you need is a PC modem, a SIM card in the area monitor modem and another SIM car for the PC modem but only if it is GSM. Beware, the SIM card for this way of communication need to be specifically enabled for CSD communication mode. This kind of specific SIM card is normally called M2M Machine to Machine.

Make sure the PIN code of the SIM card in use has been removed..

To work in this way the area monitor hast to be set in this way:

Data transfer settings S/N	140WY60903 COM	
Address: User Name: Password:	109.233.121.232 8057 pmmpass	Mobile operator Provider: User Name: Password:
Schedule		Communication
Point to Point	FTP	Modem WiFi
		WiFi Connection
Password WLan:	Master/390 Narda9010	Direct AP
Remote IP Address:	192.168.1.115	Remote IP
AP Password:	5000	OFF
Set Read		Exit

Schedule: Point to Point Communication: Modem All other field can be left blank. Press SET



Now switch the main panel of the software into Point to Point mode and add a new station. It always better add and remove stations instead of change an existing one.

A 8	A 80595W-02									
			Point to		FTP					
	#	Station Ide MO	ntifier (Name) BILE		Telephone Num 34866954123	ber   3   17/	Last Link 05/17 15.42	Links Alarm 0/0 • UnLoc	CALL	
	Operator Name —								Hang up	
									Add Station	
								/	Open Log File	
									Data Management	
		Мау	Мау	,	▶ 2017		*		Data Exchange	
	Mon	Tue	Wed	Thu	Fri	Sat	Sun		Data Export	
	1 🔺	2 🔺	3 🛦	4 🔺	5 🛦	6 🔺	7 🛦	Week 18		
	8 🔺	9 🛦	10 🛦	11 🛦	12 🛦	13▲	14 🛦	Week 19		
	15 🛦	16 🛦	17 🛦	18 🛦	19▲	20 🛦	21 🛦	Week 20		
	22 🛦	23 🛦	24 🛦	25 🔺	26 🛦	27 🛦	28 🛦	Week 21		
	29 🛦	30 🛦	31 🛦	1 🔺	2 🔺	3 🔺	4 🔺	Week 22		
	5 🔺	6 🔺	7 🔺	8 🔺	9 🔺	10 🔺	11 🔺	Week 23	Direct Readings Post Setting Piggy Bac	k
					Status				Exit	]

Now:

- Insert the Station Identifier: it is the name you decide to give to your monitor station. As default it is the serial number of the station.

- Insert the Telephone Number: it is the phone number associated to the SIM card in the area monitor

- Insert the Device Password: as default it is PASSPMM

For every field the computer will request the Terminal Password

# Station Identifier (Name)	Telephone Number	Last Link	Links	Alarm
1 NEW	34866954123	17/05/17 15.42	0/0	• UnLock
2				
Edit Station # 1 Station Identifier (Name): NEW Telephone number: 34866954123		utomatic DownLoad PC Answering PC Calling	Remo	ve Station
Scheduled Call	evice PassWord		<ul> <li>Hide dig</li> <li>Auto AS</li> <li>Autoloa</li> </ul>	gits SCII File d Elvents



Now your area monitor should be added to the list. Click once on its row and then press the button Call

æ	8059SW-02	and and a						
					FTP			
	#	Station Identifier (Name) MOBILE Now Station	Telephone Number 0123456789 012456789	Last Link 17/05/17 15.27	Links 0/0	Alarm • UnLock	CALL	
	C Operator Na		013430703		070			
							Hang up	[ ]
							Add Station	

Every time, the software will try to have a connection with the modem. Because of the area monitor is directly connected to the PC you will see the following window.



#### Press YES (SI)

Now the software will verify if the name you gave to the station is the same registered in the station's memory.

In case they are not matching the software will ask you if you want to change the name of the area monitor, stored in the internal memory, with that one you wrote in the grid, with the following window:





If you press YES the name inside the station will be changed.

This name it is just a label, the serial number of the area monitor will be always the same and cannot be changed.

If you press no, the software will ask you if you want to replace the name in the grid with that one stored in the area monitor.



The main window of the software show you all possible information about the area monitor and the probe.

Now passages to do are:

- push the button Enable Settings

- push the button Set Clock

- decide how many time and for how long the modem has to be switched on in the frame Schedule MODEM





The frame Schedule for MODEM works in the following way:

- in the blank part near the written Tel#, you have to add the telephone number of the modem connected to the PC, this just in case you want the area monitor originates an automatic call to the computer

- in the part Time, you have to decide when the modem has to be switched ON

- in the part Stand By, you have to decide for how many quarters of hours, starting from the hours of switching ON, the modem has to stay in stand by

- in the part Every, you have to decide the interval, expressed in hours, from every switching ON

Example:

in the picture the modem will be switched ON at 12:05 and it will stay switched ON, in stand by mode, for 4 quarters of hours.

This means that for 60 minutes starting from the 12:05, the modem is ready to be called or to originate an automatic call to a computer

I can do this operation every 24 hours, always for 60 minutes, always starting from the 12:05

- Originate CALL has to be set to ON only in case the area monitor has to contact the computer in automatic way

<ul> <li>Schedule for MODEM ——</li> </ul>	,
Tel #	~
Time (HH:mm)	12 : 05
Stand By (Q) 04	Every (H) 24
Originate CALL	
OFF	ON



Now you can disconnect the station from the computer and put it in the place choose for monitoring



### **BEWARE!**

Every time the Area monitor is switched OFF, and the battery pack is disconnected from it, the internal clock has to be set. It is always better prepare the first installation on site with the help of a laptop or a tablet to verify that internal clock has the right hour and date

Connect the modem to the computer to start working in CSD mode with the area monitor. Remember that the modem needs to work with a baud-rate of 115200. In case consult the user's manual chapter 3.6



Modem, FTP



In this modality the area monitor will send all data to an FTP server where they lie up . All you need is a PC modem, a SIM card in the area monitor modem and another SIM

car for the PC modem but only if it is GSM. Beware, the SIM card for this way of communication need to be specifically enabled for CSD communication mode. This kind of specific SIM card is normally called M2M Machine to Machine.

Make sure the PIN code of the SIM card in use has been removed.

To work in this way the area monitor hast to be set in this way:

Schedule     Communication       Point to Point     FTP       WiFi     Modem       WiFi     WiFi Connection       SSID WLan:     Direct AP       Password WLan:     Bemote IP	TP Address: User Name: Password:	109.233.121.232 8057 pmmpass	Mobile operator Provider: User Name: Password:	web.omnitel.it
Point to Point     FTP     Modem     WiFi       WiFi	Schedule		Communication	
SSID WLan: Password WLan: Remote IP Address: Bemote IP				
Remote IP Address:	. 8m		L	
	WiFi SSID WLan:		WiFi Connection	ct AP
AP Password: OFF	WiFi SSID WLan: Password WLan: Remote IP Address:		WiFi Connection — Dire	ct AP ote IP

#### Schedule: FTP

Communication: Modem

FTP: - Address: the static IP of the FTP server you intend to use

- User Name: the user name to enter in the FTP server
- Password. the password to enter in the FTP server

Mobile operator: these parameters depending on the service provider of the used SIM.

- Provider: the APN (Access Point Name)
- User name: user name used for GPRS connection
- Password: password used for GPRS connection



Once you set the FTP mode in the Data Transfer Settings window, you have to set the correct hours and date in the internal clock. To do this switch the main panel of the software into Point to Point mode and add a new station.

8059SW-02		6				γ			
#	Station Ide	ntifier (Name)	Point	Telephone Nu 348669541	mber 23 17/	Last Link 05/17 15.42	Links Alarm 0/0 UnLock	CALL	
Operator Name								Hang up	
								Open Log File	
	Мау	Ma	y	2017		*		Data Exchange	
Mon	May Tue	Wed	y Thu	✓ 2017	Sat	Sun		Data Exchange Data Export	
Mon 1 🔺	May Tue 2 🛦	Wed	y Thu 4 🛦	<ul> <li>✓ 2017</li> <li>Fri</li> <li>5 ▲</li> </ul>	Sat	▼ Sun 7 ▲	Week 18	Data Exchange Data Export	
Mon 1 A 8 A	May Tue 2 A 9 A	Wed 3 A 10 A	y Thu 4 & 11 &	<ul> <li>✓ 2017</li> <li>Fri</li> <li>5 ▲</li> <li>12 ▲</li> </ul>	Sat 6 ▲ 13 ▲	▼ Sun 7 ▲ 14 ▲	Week 18 Week 19	Data Exchange Data Export	
Mon 1	May Tue 2 A 9 A 16 A	Wed         3         A           10         A         17	y Thu 4 A 11 A 18 A	<ul> <li>✓ 2017</li> <li>Fri</li> <li>5 ▲</li> <li>12 ▲</li> <li>19 ▲</li> </ul>	Sat 6 ▲ 13 ▲ 20 ▲	▼ Sun 7 ▲ 14 ▲ 21 ▲	Week 18 Week 19 Week 20	Data Exchange Data Export	
Mon 1	May Tue 2 A 9 A 16 A 23 A	Wed           3 ▲           10 ▲           17 ▲           24 ▲	y Thu 4 A 11 A 18 A 25 A	<ul> <li>2017</li> <li>Fri</li> <li>5 A</li> <li>12 A</li> <li>19 A</li> <li>26 A</li> </ul>	Sat 6 A 13 A 20 A 27 A	▼ Sun 7 ▲ 14 ▲ 21 ▲ 28 ▲	Week 18           Week 19           Week 20           Week 21	Data Exchange	
Mon 1 8 15 22 29	May Tue 2 A 9 A 16 A 23 A 30 A	Wed         3         ▲           10 ▲         17 ▲         24 ▲           31 ▲         31 ▲         31 ▲	y Thu 4 ▲ 11 ▲ 18 ▲ 25 ▲ 1 ▲	<ul> <li>2017</li> <li>Fri</li> <li>5 A</li> <li>12 A</li> <li>19 A</li> <li>26 A</li> <li>2 A</li> </ul>	Sat         6 ▲           13 ▲         20 ▲           27 ▲         3 ▲	▼ Sun 7 ▲ 14 ▲ 21 ▲ 28 ▲ 4 ▲	Week 18           Week 19           Week 20           Week 21           Week 22	Data Exchange	

Now:

- Insert the Station Identifier: it is the name you decide to give to your monitor station. As default it is the serial number of the station.

- Insert the Telephone Number: it is the phone number associated to the SIM card in the area monitor

- Insert the Device Password: as default it is PASSPMM

For every field the computer will request the Terminal Password

# Station Identifier (Name)	Telephone Number	Last Link	Links	Alarm		
1 NEW	34866954123	17/05/17 15.42	0/0	UnLock		
Edit Station # 1     Station Identifier (Name): NEW     Telephone number: 34866954123		utomatic DownLoad PC Answering PC Calling	Remo	ove Station		
Scheduled Call	Device PassWord PASSPMM		Hide dig Auto As	gits SCII File d Events		



Now your area monitor should be added to the list. Click once on its row and then press the button Call

8059SW-(	02						
	Point to Point					FTP	
# 1 2	Station Identifier (Name) MOBILE New Station	Telephone Number 0123456789 013456789	Last Link 17/05/17 15.27 / /	Links 0/0 0/0	Alarm • UnLock	CALL	$\supset$
Operator	Name					Hang up	
						Add Station	

Every time, the software will try to have a connection with the modem. Because of the area monitor is directly connected to the PC you will see the following window.



#### Press YES (SI)

Now the software will verify if the name you gave to the station is the same registered in the station's memory.

In case they are not matching the software will ask you if you want to change the name of the area monitor, stored in the internal memory, with that one you wrote in the grid, with the following window:





If you press YES the name inside the station will be changed.

This name it is just a label, the serial number of the area monitor will be always the same and cannot be changed.

If you press no, the software will ask you if you want to replace the name in the grid with that one stored in the area monitor.



The main window of the software show you all possible information about the area monitor and the probe.

Now passages to do are:

- push the button Enable Settings
- push the button Set Clock
- Hang and Exit





Now turn again in the FTP mode in the main window and add a new station.

	Point to Point				FTP
#	Station Identifier (Name) New8059FTP	Last Link Never	Link None	Alarm	OPEN
Station Identi Station Identi S/I Scheduled C	fier (Name): 140WY60900 I N: 140WY60900 all Generate Call	Address: 109.233. User Name: 8057 Password: pmmpass Data 1	121.232	Remove Station ] Hide digits ] Auto ASCII File	Do not move file  Add Station
			-		Open Log File

Now:

- Insert the Station Identifier: it is the name you decide to give to your monitor station. As default it is the serial number of the station.

- Insert the S/N: it is the serial number of the station and it will correspond to the folder that will be created in your FTP server where you can find all data.

- Insert the Address: the IP of your FTP server
- Insert the User Name: the user name to enter in your FTP server
- Insert the password: the password to enter in your FTP server

For every field the computer will request the Terminal Password

Now your area monitor should be added to the list. Click once on its row and then press the button Open

Point to Point			Ĭ	I	FTP
# 1 2	Station Identifier (Name) New8059FTP 140WY60900	Last Link Never / /	Link None 0/0 0/0	Alarm	OPEN
Operato	n Name				✓ Do not move file Add Station
			/		Open Log File



The software starts to communicate with the FTP server. All communications between them is monitored by the window called Driver INET FTP

• MMB 8853 bit 1 Max               • MMB 8853 bit 1 Max               Feedboord	Driver INET FTP	
	lease 1.08 (December 2015) 140WY60	1900 rrication
O MIS 0052 / OWNED 732 / OWNED 742 / OWNED 744 / OWNED	Responses	commands
AMB 8059 as it was	000W/90922/ 000W/90793/ 000W/91238/ 000W/91238/ 000W/91028/ 000W/91028/ 000W/91028/ 000W/9102/ 000W/9102/ 000W/9102/ 000W/9102/ 000W/9102/ 000W/9102/ 000W/9102/ 000W/9103/ 000W/90902/ 000W/90902/ 000W/90902/ 000W/90903/ 000W/90903/ 000W/90903/ 000W/90903/ 000W/90903/ 000W/90903/ 000W/90903/ 000W/90903/ 000W/90903/ 000W/90903/ 000W/90903/ 000W/90903/ 000W/90903/ 000W/90903/ 000W/90903/ 000W/90903/ 000W/90903/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9003/ 000W/9000/ 000W/9000/ 000W/9000/ 000W/9000/ 000W/9000/ 000W/9000/ 000W/900/ 000W/9000/ 000W/900/ 000W/900/ 000W/900/	
AMB 8059 current settings Enable Setting Exact	<ul> <li>AMB 8059 as it was</li> <li>AMB 8059 current settings</li> </ul>	Set

The first time, the software will advise you that there is no folder on FTP server with that serial number and ask you to create it.

8059SW-02	X
S/N 140WY60900 does not Would you like to create it	exist. ?
Sì	No



Then will ask you if you want to use default settings. Choose YES for both windows



In this moment, in your FTP server, there should be a folder with the same serial number of your monitor station and inside there should be a file called creating.TXT



In the main window push the button Enable Settings and, after modify them push the button SET. For every changing the software will ask you the Setting Password

5 Station: 140WY60900				
Data	`	Alarm	3	Communication
	Retrieve data from Date & Time 18/05/2017 • 10.21 •	Up to O Date & Time 18/05/2017 10.27 Set	Rate Settings 30 second 1 minute 2 minute 6 minute 15 minute	
	Be	efresh Save	Enat	ble Setting Exit



in the FTP server there is an additional file called 8059FLD.txt

G ↓ ftp://109.233.121.2	232/140WY60900/		
Organizza *			
Preferiti Desitop Escore recenti Desettod Countral Countral	8059FLD.TXT	Creating.TXT	

In the software choose the section Communication and change the Schedule for FTP settings accordingly to your work

8	Station: 140WY60900		
ſ	Data	Alarm	Communication
	Schedule for FTP Time (HH:mm) [12 Stand By (Quarters) Every (Hours)	: 05 01 06 106 106 107 107 107 107 107 107 107 107	Ide for GPS       Time (HH:mm)       16       Every (Hours)       24       vable
			6
		Refresh Save	Enable Setting Exit

The frame Schedule for FTP s in the following way:

- in the part Time, you have to decide when the modem has to be switched ON and send data to the FTP server

- in the part Stand By, you have to decide for how many quarters of hours, starting from the hours of switching ON, the modem has to stay in stand by and try to send all data

- in the part Every, you have to decide the interval, expressed in hours, from every switching ON

#### Example:

in the picture the modem will be switched ON at 12:05 and it will try to send all data to your FTP server for 1 quarters of hours.

This operation is repeated every 6 hours for a total of 4 connections every day



Once everything is correctly set, push the button Save.

Now on the FTP server there is a file called 8059.CFG taht is the configuration file you have just created and that will be used by the area monitor, during the first connection, to modify its settings accordingly to this file

🕞 🔵 🗢 🚺 ftp://109.233.121.2	232/140WY60900/	I	
Organizza *			
🚖 Podeiti	Nome	Dimensione	Tipo
E Desktop	8059.CFG	1 KB	File CFG
1 Roome recenti	8059FLD.TXT	1 KB	Documento di testo
Download	Creating.TXT	1 KB	Documento di testo

Now we have to force the first connection between the Area Monitor and the FTP server. Send a SMS with a mobile phone to the Area monitor with the following message:

#BM?IDN(space)password\*(space)#BMSCGN\*

Where:

- (space) means you have to leave a space
- password is the Device Password

As default the Device Password is PASSPMM. For further details about Device Password consult the users manual chapter 7.5

In this case, with factory settings, the message will be:

**#BM?IDN PASSPMM\* #BMSCGN\*** 

During the connection, the AMB-8059 will look for the CFG file with new settings. In case it is present, the area monitor change its internal settings and at the end it will leave a new file called 8059.SET. This new file is used by the software to show the last area monitor settings.



This last operation can also be done via cable RS232, using Windows HyperTerminal, or any other software like it. To allow communication between the Hyper Terminal software and the area monitor, it has to be set with following configuration:

Baud-rate:115200Data:8 bitParity:NoneStop:1 bitFlow control:None

In this way you have to send the command #BMSCGN\*



The connection should be completed within 5 minutes.

Here an example about what you should have on your FTP server:

Nome         Dimensione         Tipo         Ult           10_05_24_03_17D59         1 KB         File D59         24,           10_05_24_03_17TXT         1 KB         Documento di testo         24,           10_14_24_03_17TXT         1 KB         Documento di testo         24,           10_14_24_03_17TXT         6 KB         Documento di testo         24,           8059.CFG         0 KB         File CFG         03,           8059.set         1 KB         File SET         03,           8059FLD.TXT         1 KB         Documento di testo         03,           Creating.TXT         1 KB         Documento di testo         03,				
10_05_24_03_17D59       1 KB       File D59       24,         10_05_24_03_17TXT       1 KB       Documento di testo       24,         10_14_24_03_17D59       75 KB       File D59       03,         10_14_24_03_17TXT       6 KB       Documento di testo       03,         8059.CFG       0 KB       File CFG       03,         8059.set       1 KB       File SET       03,         8059FLD.TXT       1 KB       Documento di testo       03,         Creating.TXT       1 KB       Documento di testo       03,	Nome	Dimensione	Тіро	Ult
10_05_24_03_17TXT       1 KB       Documento di testo       24,         10_14_24_03_17D59       75 KB       File D59       03,         10_14_24_03_17TXT       6 KB       Documento di testo       03,         8059.CFG       0 KB       File CFG       03,         8059.set       1 KB       File SET       03,         8059FLD.TXT       1 KB       Documento di testo       03,         Creating.TXT       1 KB       Documento di testo       03,	10_05_24_03_17D59	1 KB	File D59	24,
10_14_24_03_17D59       75 KB       File D59       03,         10_14_24_03_17TXT       6 KB       Documento di testo       03,         8059.CFG       0 KB       File CFG       03,         8059.set       1 KB       File SET       03,         8059FLD.TXT       1 KB       Documento di testo       03,         Creating.TXT       1 KB       Documento di testo       24,	10_05_24_03_17TXT	1 KB	Documento di testo	24,
10_14_24_03_17TXT       6 KB       Documento di testo       03,         8059.CFG       0 KB       File CFG       03,         8059.set       1 KB       File SET       03,         8059FLD.TXT       1 KB       Documento di testo       03,         Creating.TXT       1 KB       Documento di testo       03,	10_14_24_03_17D59	75 KB	File D59	03,
8059.CFG         0 KB         File CFG         03,           8059.set         1 KB         File SET         03,           8059FLD.TXT         1 KB         Documento di testo         03,           Creating.TXT         1 KB         Documento di testo         24,	10_14_24_03_17TXT	6 KB	Documento di testo	03,
8059.set         1 KB         File SET         03,           8059FLD.TXT         1 KB         Documento di testo         03,           Creating.TXT         1 KB         Documento di testo         24,	8059.CFG	0 KB	File CFG	03,
8059FLD.TXT         1 KB         Documento di testo         03,           Creating.TXT         1 KB         Documento di testo         24,	8059.set	1 KB	File SET	03,
Creating.TXT 1 KB Documento di testo 24,	8059FLD.TXT	1 KB	Documento di testo	03,
	Creating.TXT	1 KB	Documento di testo	24/

As you can see the CFG file is now of 0 kB. This means that the area monitor has correctly taken new settings.

The AMB -8059 is now ready to work in total autonomy.



### **BEWARE!**

Every time the Area monitor is switched OFF, and the battery pack is disconnected from it, the internal clock has to be set. It is always better prepare the first installation on site with the help of a laptop or a tablet to verify that internal clock has the right hour and date



### **BEWARE!**

We strongly suggest to avoid free FTP storing services in general because of the many limitations and poor stability they exhibit. Overall features are not sufficient to guarantee a completely automatic system as Narda monitoring station.

Specifically, the free "royalwebhosting" service offers only passive FTP communication, whereas Narda monitoring station is designed for active FTP communications. The free "royalwebhosting" service has a maximum of 5 connections (per time). This limitation, more often than not, stops FTP communication in the middle of data upand down-load even on the same TCP session between the server and the same client. The free "royalwebhosting" service often exhibits very long reply times which trigger Narda monitoring station TO procedures.

To try Narda monitoring stations and setup a first working setup, we can provide you FTP space on our private server. However, for a future actual installation, you will need to arrange your own FTP server without the cited limitations.



### **Optical fiber, Point to Point**



This is the easiest way to communicate with he area monitor.

Insert the USB-Optical adaptor in the computer and wait for the automatic driver installation. When you launch the software 8059-SW02, in the first window you have to push the button Change:

8059SW-02
Safety Test Solutions®
an <b>B</b> Communications Company
Communication
Change COMM 4
Release 1.20 (February 2017)



From the drop down menu choose USB Serial Port (COMx) where x is the number the computer associates to the converter.

	8059SW-02
	🖏 Communication
	USB serial Fort (CDM4) USB serial Fort (CDM4) Prolife USB-to-Stelial Comm Port (CDM27)
	Fore         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0
	Ethemet - O           [ 5000           [ 132           [ 158
Communication Change	Exit
	Release 1.20 (February 2017)

Now switch the main panel of the software into Point to Point and use the function direct readings to immediately receive data from the area monitor. For further explanation consult the User's manual chapter 3.12

8059SW-02			-	-		100.00	D X 1	6×		
		Point to	Point			)		FTP		
# 1 2	Station Ide News 140¥	ntifier (Name) 8059FTP 7Y60900		Last L Neve	ink er '	Links 0/0 0/2	Alarm		OPEN	]
Operator Name -									Do not move file	
									Add Station	]
								l	Open Log File	]
	Мау	Ма	y	2017		<b>v</b>		Data Mar	nagement Data Exchange	
Mon	Tue	Wed	Thu	Fri	Sat	Sun	]		Data Export	
1 🔺	2 🔺	3 🔺	4 🔺	5 🔺	6 🔺	7 🛦	Week 18			
8 🔺	9 🔺	10 🛦	11 🛦	12 🛦	13 🛦	14 🛦	Week 19			
15 🛦	16 🛦	17 🛦	18 🛦	19 🛦	20 🛦	21 🛦	Week 20			
22 🛦	23 🛦	24 🛦	25 🛦	26 🛦	27 🛦	28 🛦	Week 21			
29 🛦	30 🛦	31 🛦	1 🔺	2 🔺	з 🛦	4 🛦	Week 22			
5 🔺	6 🔺	7 🔺	8 🔥	9 🔺	10 🔺	11 🔺	Week 23	Dire	ct Readings	
			(	Status		_			E	sit



### **Car Mounting Kit**



The car mounting kit allows to have a fast monitoring of a big area. It consists to use an area monitor model 8059-00, with a magnetised adapter placed on the roof of a car.

With a direct connection through a optical fiber it is possible to record data like values and GPS coordinates. In a second moment the track can be visualized on a map with graphic indications about the field values.

Unscrew the area monitor from its basement and place it on the car mounting kit.

Insert the USB-Optical adaptor in the computer and wait for the automatic driver installation.

Now connect the area monitor to the computer with the 10 m optical fiber and switch it on.

Now launch the software NardaEMFGPSLogger.exe

For further explanation consult the User's Manual chapter 10.

### BEWARE!

Contrary to the previous software, the NardaEMFGPSLogger does not need a special installation "Run as administartor", also the area monitor is automatically recognized by the software without giving any indication about the used port.

Remember to have the area monitor switched on, before to run this software and just aptor.

one USB/OC adaptor.

The USB/OC adaptor has a FTDI chipset inside, it would be better to remove any other peripheals with the same chipset connected to the PC.

Always use, at least, a 10 m optical fiber.



When you run the software with the area monitor switched off or not connected, a window will advise you.



In the main window, from the settings drop down menu, select the option limits

8059MobileViewer     Image: Settings     Preferences     ?       Limits     Image: Settings     Alarm						
	0	.000	V/m			
GPS Lat Connection	itude 0.0000	Longitude 0.0000	Battery 0.0000			
	Start	Pause	Stop			
Era	se Memory	Create GPX	Exit			

Edit treshold limits you need to respect and push OK. In this example we have just one treshold because we are using a monoband probe. In case of a probe with more than a single band, a treshold will be requested for every single band.

⊥ Dialog	8 ×
Limits	
Wideband	6.000 V/m
	OK Cancel



In case the option Alarm is checked, every time the treshold is crosse, an acoustic alarm will warn you.

8059MobileViewer								
	Settings	Preferences	?					
	Limi	ts						
	🗌 Aları	n k						

Now you can start to log file from the area monitor.

Remember that every time a new log session starts, all data in the area monitor's memory will be permanently deleted.

In case of doubt it would be better create a new GPX file to save all data present in the area monitor

⊥ Narda	EMFGPSLogger
?	Please note that the memory will be erase, continue?
	Yes No



Every time a new log session starts, a limit is changed or a GPX is saved, you can find all these data inside the folder.

 $\label{eq:c:losers} C: \label{eq:c:losers} C: \label{eq:c:losers}$ 

This folder contains 3 file:

- 8059log.txt
- 8059Data.gpx
- (probe name)\_limits.dat

The 8059log.txt contains all information about acquisition like probe's name, GPS coordinates and field values.

The 8059Data.gpx is the file that will be used to create the track on the map.

The file (probe name)\_limits.dat is just the limit associated at that probe model



### **BEWARE!**

The software does not allow to save these file with a specific name. For every new session, old file will be overwritten by the newest. Remember to rename all saved file before run a new session.

Every time a new log session starts, all data in the area monitor's memory will be permanently deleted.



Now it is possible to start our log session.

8059MobileVi	rences ?						
Wideband	Wideband						
		0.	00	V/m			
GPS La	atitude		Longitude	Battery			
Connection	44° 04.5023	N	008° 09.5465 E		3.54V		
Start			Pause		Stop		
Er	ase Memory		Create GPX		Exit		
MES=0.00;0.00;0.	MES=0.00;0.00;0.00;; V/m; 3.54V; \$GPRMC,125646.000,A,4404.5023,N,00809.5465,E,0.75,24.27,301017,,,A*5A>30/10/1714:55:58*						

In the main window is it possible to see the instant value of the field. In this example we are using a monoband probe. Probes with more than a single band, will show the instant value of every band. Behind the field value there are general information, latitude, longitude and battery status.

On the left there is the status of GPS connection, when it is green the connection is established and, at the same time, the LED on the front panel of the area monitor blinks green.

When there is no GPS connection there is a red status of the this square and also of the area monitor's LED.



At the end of the acquisition, when it is necessary to export data into a GPX file, the software will ask you the field limit.

<u>I</u> N	lardaEMFGPSL	o 🤋 🗖	x
Field	d limit		
20			•
	ОК	Cancel	

This parameter works with the limits setted at the beginning and is used to determinate the size of the measured field on the track.

For example:

I set my treshold limit at 6 V/m but the field limit is 20 V/m.

On the track i will have a circle for every acquisition.

Higher is the field and bigger will be the circle.

The circle color will start from a dark blue, in case of low field values, up to red, in case of high fields. Look at the below example done with a magnetic probe:





The software NardaEMFGPSLogger is not able to manage a GPX file.

We suggest to use the free website GPS visualizer, http://www.gpsvisualizer.com/, to convert GPX file into a map.

Use the browse button to select the file from your computer.

Leave the output format on Google Map and then click on the button "Map It"



Now you have your track on a map. Download the page into html extension.

#### Google Maps output

Your GPS data has been processed. Your Google Map should be displayed below, and it's also temporarily available to view or download from GPSVisualizer.com.





### Area monitor installation guide

#### Where to place an area monitor?

The placement of an area monitor is a compromise between a non-easy access site, to avoid possible vandalism, and a place that requires continuous monitoring.

Normally a roof, a very large terrace, an open place and on a straight surface, is the place that is most advisable.

# For example, in case of a hospital or a kindergarten, why not put the instrumentation where people are?

As already explained, the instrumentation must be in a place not easy to access.

This is to avoid accidental damages from children's games such a balls or something else, possible signal influences caused by the passage of people with special equipment or who simply speak on the cellphone. Possibly avoid placing the control unit in a place where it can be easily subjected to vandalism.

We also have to consider that signals we are going to monitor come from antennas, high voltage trellis, a technology that radiate even for miles. If the signal, we are detecting, on a roof is already low, it will be even more inside the building or at a distance greater than the emission point.

Instead, if the detected signal is near or exceeds the limits that is the area where we will have to investigate with more specific, selective equipment.

### Exactly, once on a roof or a terrace, where and how does the control unit be installed?

First of all we must remember that the area monitor is powered by batteries that are recharged during the day thanks to its solar panel. Then the first thing to do is choose a sunny place and point the solar panel in the SUD direction, if possible, or at least avoid positioning it completely toward NORTH. Verify the presence of any objects or constructions around them does not create a shadow that will undermine the work of the solar panel.

Avoid places too close to large metal objects, or any objects that may interfere with the electromagnetic field, invalidating the measurement.

Where possible, it is good to install the area monitor at a certain distance from walls, palaces, pillars, high voltage trellis or other similar objects.



#### What is the minimum distance I should keep from a wall or any other object?

Much depends on the type of material it is made, its density, how the environmental factors affect it. If we take the example of an area monitor mounted on a wall bracket, we must also consider how the latter will act on the signal that it is going to measure. If the wall was made of polystyrene, the control unit could also be attached to it, but in reality the density of the materials with which the wall is made, affects the signal.

It is also necessary to consider the atmospheric phenomena which, in conjunction with the structures around the control unit, can affect the signal.

During a rain, with the slightly wet wall, will the reflected signal be the same? And if instead of just being slightly wet it was completely covered with water? How does the refraction of the signal change?

It should be remembered that the area monitor measures a true value. If in a point the probe marks 10 V/m, it is because in that precise point there are actually 10 V/m, which is the result of the sum of all the vector components, so both the direct and the reflected signals.

#### How do you know what is the most suitable point?

Good sense says that at least 3 to 4 meters away help minimize possible perturbations of the signal that you go to measure.

The best approach would be to use a wide bandwidth meter and make pads in some parts of the area chosen for installation, trying to locate an area where the signal is more homogeneous.

You do not just have to consider radio frequency though. Area monitors are programmed to send data using a SIM card. So also the presence of the GSM / 3G signal is important. We recommend using a cell phone to evaluate the presence and quality of cell signal.



### Troubleshooting

Windows HyperTerminal, or any other software like it, and a serial port monitor could be useful tools to check the station operation when connected to the controller PC through the RS232. You can check attempts of the station to connect to the GPRS network and its operation. Hyper Terminal and Serial Port Monitor show activity of the station being it connected to the PC RS232.

To allow communication between the Hyper Terminal software and the area monitor, its has to be set with following configuration:

Baud-rate:115200Data:8 bitParity:NoneStop:1 bitFlow control: None

In this way it is possible to send all commands described in the user's manual chapter 4 and also verify the answer from the monitor station

### When I open the software, some sections are not active

- Verify to have pushed the button Enable setting.

- Verify the area monitor is correctly set to work in Point to Point mode or in FTP mode. The choice of one mode can exclude some parts of the software when used in the other mode.

Example

When the AMB-8059 is set to work with the modem all sections concerning the Wi-Fi, are not activated

#### The software is not able to have a connection with the FTP server

- Verify to have put correct IP address, user name and password for the FTP connection

- Try to enter in the FTP server with a browser (Mozilla, Safari, Internet Explorer,...)

- Verify that a firewall, or an anti-virus, is not blocking the connection, try to temporarily disable them just to try once



Sometimes, when i download data, i receive the window message: Non homogeneous data file



This happens because some settings have been changed. The software NSTS is not able to manage, in the same day different settings regarding Rate Settings and probe model. When, in the same day one or both these parameters change we have a not homogeneous data in that specif day. The software will show you only data before the settings change. Data will be correctly available only from the next day.

To avoid this it would be better download all possible data before any change. Export these data and then delete the folder of that specific day.





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