OUMAN

3G-MOD3



Ouman 3G-MOD3 is a 3G modem which can be used to create a mobile network in premises where such a network does not readily exist. Connection requires a SIM card with data connectivity (preferably with unrestricted data roaming. PIN code query must be disabled). The product package includes a 3G modem, power source and an antenna. SIM card with data connectivity can be acquired from Ouman (3G-L1 or 3G-L2) or your own operator.

In addition, Ouman Access service and an Ouman Access compatible terminal such as Oulink, Ouflex A or external Access device, are needed to establish a secure connection from the Internet to automation devices. For more information about the Ouman Access service, please visit our website at www.ouman.fi/dokumenttipankki

Installation and start-up:



3G-MOD3 is delivered with the Ouman connection settings installed. If using the Ouman 3G-L1 or 3G-L2 connection, default settings can remain as set. If some other operator's SIM card is used, connection settings may need to be changed. For the correct data traffic settings, please contact your own service provider. To change connection settings, see the instructions on p. 2-4.

- 1 Insert SIM card into the 3G-MOD3 device (see attached picture). The card must be a mini-SIM (25 mm x 15 mm). Press the release button with e.g. the tip of a pen.
- Connect the external antenna to 3G-MOD3's 3G Antenna connector. Avoid placing the antenna close to thick stone walls. In demanding conditions, place the antenna as high as possible or next to a window.
- 3 With an RJ-45 cable, connect LAN1 port of the 3G-MOD3 to Access-compatible device's internet / WAN connector. The cable must be CAT-5E or more.
- 9 Plug in the power cords to both devices (power on). The system is now ready for use. When connecting your computer to 3G-MOD3, make sure the computer is adequately secured.

Modem signal lights:

Indicator ligh	t	Indicator light status	Functional description
<u> </u>	٠	Red on	Hardware failure (Note! When the modem is connected to power, indicator light comes on for a moment and then goes off. This is totally normal.)
		Red blinking	Software error
Power	٠	Green on	Modem connected to power
	•	No light	Modem not connected to power
Signal	•	Yellow light on	Radio network connection OK
		Yellow light blinking	Radio network connection weak
	•	No light	No connection to radio network
Network		Yellow light on	SIM card in place
		Yellow light blinking	Device has registered to radio network
	۲	No light	No SIM card in place
Activity	•	Yellow light on	Mobile data service connected
		Yellow light blinking	Network sends and receives mobile data
	•	No light	Mobile data service not activated
Wi-Fi		Blue light on	Wi-Fi network activated
	0	Blue light blinking	Wi-Fi sends and receives data
		No light	Wi-Fi not activated

Changing connection settings:

If you have acquired an Ouman 3G connection, the modem is directly ready for use (Sonera, Elisa and DNA mobile subscriptions). If you are using another operator's subscription, APN address may need to be changed. In factory configuration, modem's APN is "internet". Check your own operator's APN address and change if necessary (see section 4 of the manual).

Other modem settings can normally stay as they are. If factory settings are for some reason lost, they can be restored following the instructions below.

- 1. To reset the modem to factory settings, press the RESET button at the end of the device with, for example, a partially opened paper clip. The modem must be turned on.
- DHCP on your computer must be enabled. If you have connected 3G-MOD3 to your computer using an RJ-45 cable, open your browser and go to address 192.168.1.1. The 3G-MOD3 management page opens. Type admin in the Username field, then admin in the Password field, and click "log in".

) II 💽 🧔 (E200 Series	maestro	
Maestro			
Authorization Required			
Username admin			
Password			
D Login 🙆 Reset			

3. In the top menu bar, select System \rightarrow System

Maestro	Quick Setup	Status	System	Network	Services	Logout
			System			
			Administrat	tion		
			Software			
			Backup / F Firmware	lash		
			Reboot			

On System tab, change Timezone to Europe/Helsinki. Save by clicking **Save & Apply.**

Aaestro Quick Setup	Status System	Network	Services	Logout	AUTO	EFRESH ON
System Here you can configure the basi	c aspects of your device li	ke its hostna	me or the tim	ezone.		
System Properties						
General Settings Logging	Language and Style					
Local Time	Thu Aug 13 03:16:25 20	5 D Sync	with browser			
Hostname	Maestro					
Hostname	Maestro					
Timezone	Europe/Helsinki Europe/Dublin	۲	-			
	Europe/Gibraltar Europe/Guernsey		•			
Time Synchronization	Europe/Helsinki Europe/Helsinki					
rime Synchronization	Europe/Istanbul Europe/Jersey					
Enable NTP client	Europe/Kaliningrad Europe/Kiev					
Provide NTP server	Europe/Lisbon Europe/Ljubljana					
NTP server candidates	Europe/London Europe/Luxembourg		×			
	Europe/Madrid Europe/Malta		×			
	Europe/Mariehamn Europe/Minsk					
	Europe/Monaco Europe/Moscow		1			
	Europe/Oslo		-			

4. Go to System → Administration



Under **Dropbear Instance**, change Interface to "**lan**". Scroll down to the bottom of the page and save by clicking **Save & Apply.**

		٥	<u></u>			00 Series	maest			
Maestro Quid	k Setup	Status	System	Network	Services	Logout				
Router Pas Changes the adminis			essing the de	vice						
F	Password				8					
Cor	nfirmation				22					
Dropbear Insta	ince								Delete	
	Interface									
		Ian:	2							
		O oper	nvpn:	-						
		pptp	17600							
		© wan	. <u>.</u>				String & Apply	Sava Posot		
		wanwww.	17600	es attached)			Save & Apply	Save Reset		

5. Next go to Network \rightarrow Interfaces.

Maestro	Quick Setup	Status	System	Network	Services	Logout
				Interfaces		1
				Load Bala	incing	
				Wifi		
				DHCP an	d DNS	
				Hostname	35	
				Static Ro	utes	
				Diagnosti	cs	
				Firewall		

Select 3G tab, tap on the APN field, and enter "**internet**". If your operator uses a different address, type it in this field. Save by clicking **Save & Apply.**

	<u>)</u>			00 Series	maestro
Maestro Quick Setup	Status System	Network	Services	Logout	AUTO REFRESH ON
3G WAN PPTP	LAN WWAN	OPENVPN			
network interfaces separated b	/ spaces. You can also i				interfaces" field and enter the names of several
Common Configuration	d Settings Firewall	Settings			
Status		3g-3g		RX: 0.00 B (0 Pkts.) TX: 0.00 B (0 Pkts.)	
Protocol	UMTS/GPRS	۲			
Service Type	UMTS/GPRS	•			
APN	internet]				
PIN					
Username					
Password					
					Save & Apply Save Reset

6. Select WAN tab and then **Physical Settings.**

Under Interfaces selection click **Custom Interface** and leave the name field blank. Save by clicking **Save & Apply**. A warning will appear on the screen, but you can ignore it.



7. Select LAN tab and then **Physical Settings**.

Select Interfaces and activate VLAN Interface: "eth0.2". Also VLAN Interface: "eth0.1" and Wireless Network must be active. Save by clicking **Save & Apply**.



8. Go to Network → Wifi.

	E200 Series maestro)
Maestro Quick Setup Status System Network Services Logout Interfaces Logo Balancing	Maestro Quick Setup Status System Network Services Logout Auto REFRESH ON radio: Master "Maestro E200"
Wit Wit DHCP and DNS Hostnames Static Roades Diagnostics Firewall	Wireless Network: Master "Maestro E200" (wiano) The Jevice Configuration section covers physical settings of the radio hardware such as channel, transmit power or anterna selection which are shared among all defined wireless networks (if the radio hardware is multi-SSID capable). Per network settings like encryption or operation mode are grouped in the <i>interface</i> Configuration Device Configuration General Setting Advanced Settings
	Status Mode: Master SSID: Maestro E200 0% BSSID: A4.AE.94.00.24.43 [Encryption: mixed WPA/WPA2 PSK (CCMP) Channel: 11 (2.42.67ke) [T.8-Power 20 dBm Signat: 0 dbm Noise: 0 dbm Signat: 0 dbm Signat: 0 dbm Bitrate: 0.0 Mbd/s Country: 00
Generic IMA28011 B22.11bps (radiof) (a) 5124 (b) 5125 (b) 6435 Channel: 10.2-42 GHolj (blower Holes) (a) 5520 (b) 6445 (b) 6435 (c) 6435 (a) 5500 (b) 5520 (b) 6445 (c) 6435 (c) 6435 (c) 6435 (b) 5500 (c) 6435 (c) 6435 (c) 6435 (c) 6435 (c) 6435 (b) 5500 (c) 6435 (c) 6435 (c) 6435 (c) 6435 (c) 6435	Wreless network is enabled Disable Channel 11 (2.452 GHz)
(CORP) (Effits memory) Associated Stations 5500 MACAddews IPv4Addees Signal Notice RX Rate TX Rate	Transmit Power 20 dBm (100 mW) •
No information available	Interface Configuration General Setup Wireless Security MAC-Filter
n the window that appears, go to wireless network status and click " Disable ". Save ny clicking Save & Apply .	Mode Access Point

- 9. Select **Advanced Settings** tab. Under Country Code, click FI-Finland. Save by clicking **Save & Apply**.
- 10. To finish, click "Logout".

					00 Series	maestro))
Maestro o	uick Setup	Status System	Network	Services	Logout		AUTO REFRESH ON
radio0: Master "M	Maestro E200"						
The Device Config all defined wireless Configuration.	uration section o a networks (if the		ings of the radio	hardware such	as channel, transmit p	ower or antenna selection which on or operation mode are group	
Device Config General Setup	guration Advanced S	ettings					
	Band	2.4GHz (802.11g+n)				
HT mod	de (802.11n)	20MHz	۲				
Ci		FI - Finland EC - Ecuador	۲	▲ country code			
Distance O	Optimization	EE - Estonia EG - Egypt EH - Western Saha ER - Eritrea		k member in			
Fragmentatio	n Threshold	ES - Spain ET - Ethiopia FI - Finland					
RTS/CT	S Threshold	FJ - Fiji FK - Falkland Island FM - Micronesia FO - Faroe Islands FR - France	ds				
Interface Cor	nfiguration	GE - Georgia					
General Setup		GF - French Guiana GG - Guernsey GH - Ghana Access Point	•	•		Save & Apply	/ Save Reset

To activate Wi-Fi connection, under item 8, change wireless network status to "**Enable**". Save by clicking **Save & Apply**. If Wi-Fi is enabled, we recommend changing the name of the Wi-Fi network and the password. Name of the network is entered under **General Setup** in ESSID field. The default value is Maestro E200. To change the password, go to **Wireless Security**, tap on Key and enter the new password. Save by clicking **Save & Apply**.

Operators' APN addresses (see p. 3, phase 4)

Operator	APN
DNA	internet
Elisa	internet
Saunalahti	internet.saunalahti
Saunalahti Prepaid	internet
Sonera	internet
Tele Finland	internet
Welho	internet.welho.fi

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NOTE! Operators' connection settings may have changed after the printing of these instructions. If the connection does not work with the APN settings given, check the valid settings from your own operator.

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