

Hardware Setup Guide



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Eka Systems Proprietary

STEP 1 Identify the hardware

Identify the following components that are part of the BlueMeter Hub package.

- BlueMeter hub, with its attached Bluetooth dongle.
- BlueMeter Module for the electric meter.
- 5V DC adapter to power the BlueMeter hub.
- CD media with the BlueMeterTM Network Manager software.
- BlueMeterTM Network Manager User Guide.

STEP 2

Configuring the IP Address on the Hub

For connecting the Hub on to a LAN. Follow the procedure outlined in this step.

Components required:

- 1. PC with Windows 95, Windows 98, Windows 2000, Windows NT and Windows XP operating system.
- 2. PC must have an available serial port.
- 3. Network Manager Software CD.
- 4. 9-pin female-to-female null modem cable.
- 5. Two Ethernet cables for LAN connectivity.
- 6. Configuring the PC on the local LAN.

Configuring the IP address on the Hub.

- 1. Connect the PC on to a local LAN.
- 2. Install Network Manager Software on the PC.
- 3. Bring up the Network Manager software by selecting 'Start->Programs->Eka Systems->BlueMeter Network Manager->Launch BlueMeter Network Manager'.

- 4. Connect the DC power cable (included) to the Hub.
- 5. Connect the other end of the DC power cable to the power outlet.
- 6. Connect the null modem cable to the available serial port on the PC running the Network Ma nager and the 'COM2' port on the Hub. (Null Modem cable not included).
- 7. Follow the steps outlined in Chapter 2 of the BlueMeter Network Manager User Guide to add a Hub using a serial port connection as shown in the picture below.
- 8. Once the Hub is added, double click on the Hub that is just added.
- 9. The user will be prompted to enter the username and password for the Hub. (Use the username and password provided with the Hardware setup guide).
- 10. The user will see the screen as shown in Figure 5 of the BlueMeter Network Manager User Guide.
- 11. Click on 'Set Hub IP Address' from the Advanced Configuration option.
- 12. The 'Set Hub IP Address' button allows the user to enter an IP address and a Netmask for the Hub Figure 1.

🚯 Hub IP Address Dialog				×
Please enter th	e IP addres	ss and Net I	Mask for th	e hub.
IP Address	10 .	0 . 0	. 1	
Net Mask	255 .	0 . 0	. 0	
[<u>S</u> ave	<u>C</u> ancel		

Figure 1 Set IP address dialog box

- 13. Enter the new IP address in this dialog box and save.
- 14. Once the IP address is configured, the Hub may be moved and relocated to any desired spot, provided access to the LAN is available.

To Verify the IP address, please perform the following:

- 1. Remove the null modem cable between the PC and the Hub.
- 2. Using the Ethernet cable, connect Hub to the local LAN drop.
- 3. Follow steps outlined in Chapter 2 of the BlueMeter Network Manager User Guide to 'Configure the Hub' to communicate over the LAN.
- 4. Once the Hub is configured and added in the list of Hubs (with Network option), follow steps in section 2.2 of the BlueMeter Network Manager User guide to connect to a Hub.

STEP 3 Install the BlueMeter Module

The BlueMeter add-on card must always be installed as the innermost option board (the board closest to the kV meter's main board). Please refer to the GEkV meter's option board installation procedure to install the BlueMeter add-on card. If there are any other option boards, install them above the BlueMeter add-on card.

In accordance with the labeling requirements of the FCC, the identity of the BlueMeter card must be visible after the installation of the GEkV meter. This can be done by placing a label with the following information on the meter in a location that is visible after installation.

FCC ID: P9X-EMS-MM-GE

STEP 4 Additional connections

To access the hub from MeterMate through serial port, connect a nullmodem serial cable between the COM2 port on the hub and any COM port on the PC. Please note that the serial port on the hub is configured to communicate at 9600 baud.

FCC Notice

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

Information to the User

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

RF Exposure Warning

As the BlueMeter contains a radio frequency transmitter RF energy is present and caution must be used when installing the unit and during normal usage.

A safe distance of 20cm from the antenna of the device must be maintained during normal operation. The BlueMeter must be installed in the GEkV meter to maintain this safe distance. Additionally, the BlueMeter must not be co-located or operating in conjunction with any other antenna or transmitter