

The Ethernet pod (option) can be installed into either position in the back of a M850 power meter. The pod incorporates a 10/100Base-T Ethernet controller. The protocols supported are:

- | | |
|-----------------|-----------|
| 1 Telnet | Port 23 |
| 2 Modbus TCP/IP | Port 502 |
| 3 Modbus TCP | Port 4000 |
| 4 HTML | Port 80 |

A cross-over CAT5 Ethernet cable should be used if the network card doesn't automatically swap lines to suit the cable's terminations.

Configuring the pod

The factory default settings of the pod, IP address 192.168.92.123, mask 255.255.255.0 and default gateway 192.168.92.254, can be recalled by depressing the button under the lid for 15 seconds at any time.

Connect the meter to a computer's network port using a cross-over Ethernet cable.

Set up the computer's port as follows:

Windows 7:

Select 'Network and Internet' and then select 'Network and Sharing Center'. Click on Change Adapter Settings.

Windows XP:

Select 'Network and Internet Connections' and then select 'Network Connections'.

① Double click the network connection you have connected the pod to. ② Select 'Properties'.

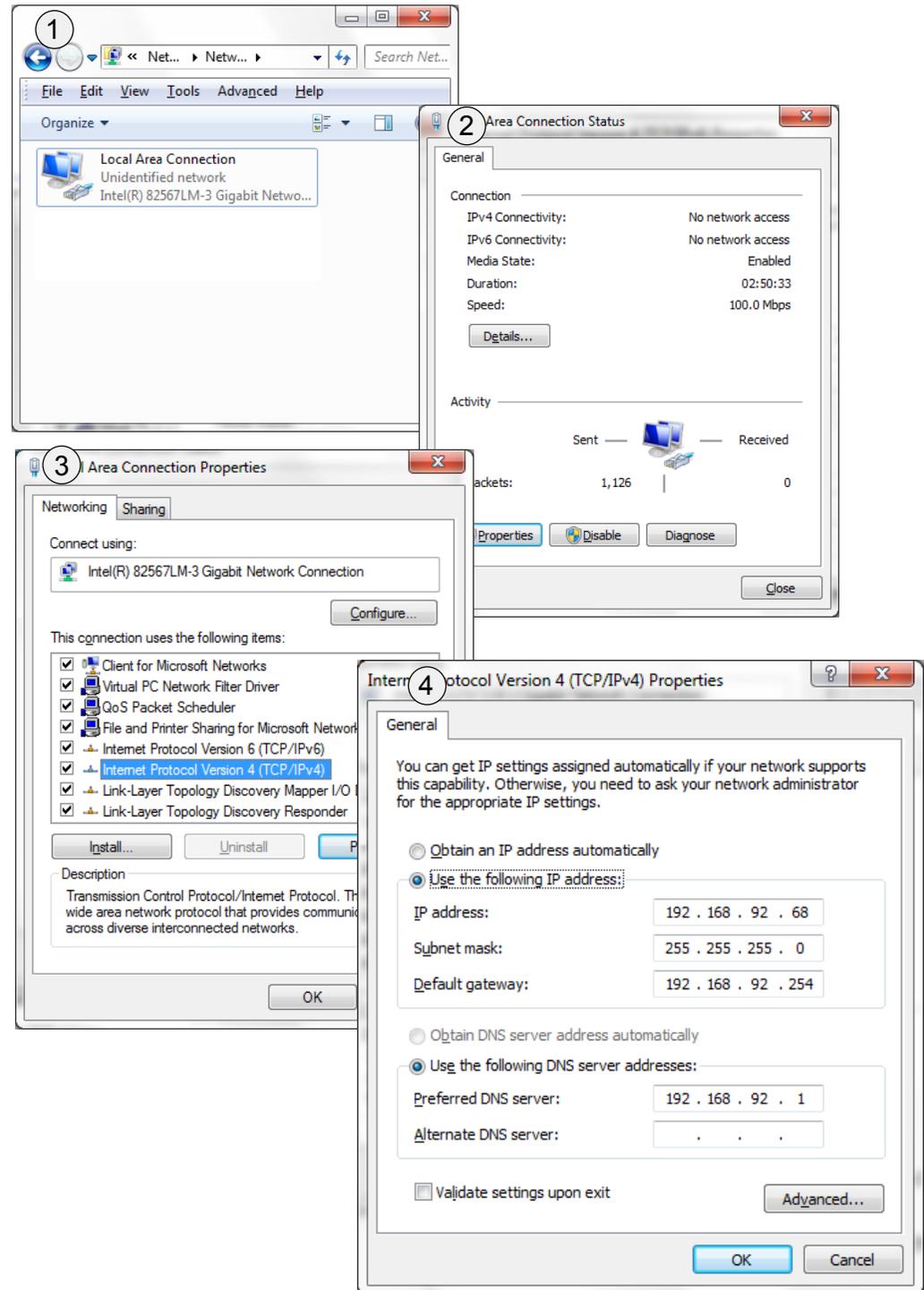
③ Click on 'Internet Protocol 4' or 'Internet Protocol (TCP/IP)' and 'Properties'.

④ Using the example, enter the recommended settings. (IP = 192.168.92.68, Subnet = 255.255.255.0, Gateway = 192.168.92.254)

The pod will now be accessible through a web browser using the network address 192.168.92.123.

To change any settings in the pod and/or meter at this stage will require the use of a Telnet client program.

Computers using a Windows operating system have this ready to be installed.



Installing Telnet (client) Software

Windows 7:

Open 'Control Panel' and click on 'Programs'
Select 'Turn Windows Features on or off'.

① From the list shown, tick the 'Telnet Client' box and then OK.

The software will be installed and access to it will be through the RUN command from Windows 'Start->All Programs ->Accessories'

② Enter telnet to run the program.

Windows XP:

From the Start menu, select RUN.

② In the Open drop-down list box, type in Telnet to run the program.

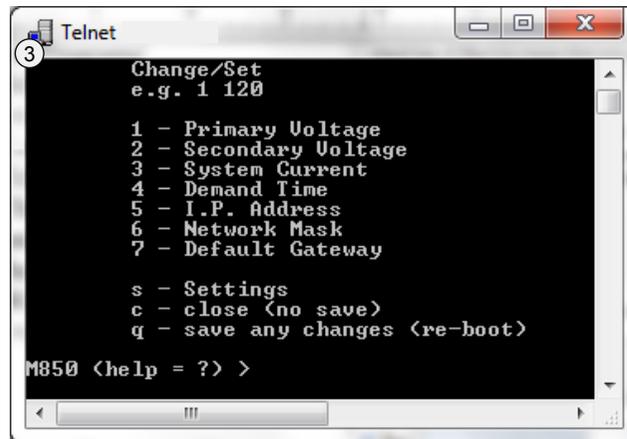
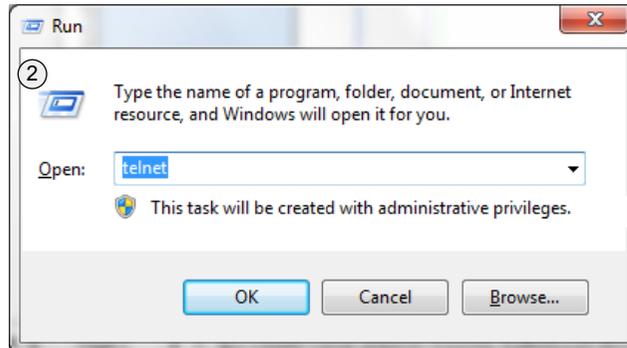
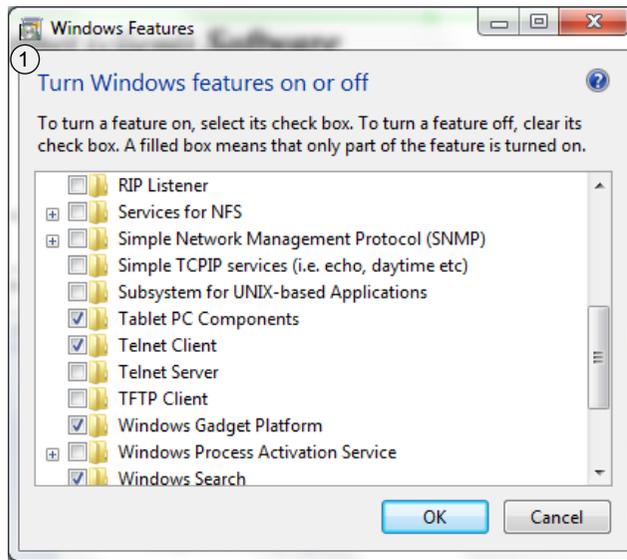
At the prompt type in:
O 192.168.92.123

③ A menu will be displayed.

It's here that final network settings can be entered and meter settings changed.

e.g. To change the network address to 192.168.92.21, enter
5 192.168.92.21

Note. IP address, mask and gateway changes are not implemented until Telnet is closed using command q.



Connecting to an existing network:

The network settings will have to be obtained from the network administrator.

If the network settings match those of the pod's and its address is unique to that network, the pod can be introduced onto the network and used without alteration.

Alternatively, new network settings will have to be entered using Telnet as previously documented.

SCADA software using Port 502 can use the Modbus TCP/IP protocol to monitor the meter.

MultView software (Windows application) using Port 4000 and a virtual port driver (not supplied) can be used to monitor the meter.

A browser (HTTP Port 80), using the meter's IP address (default 192.168.92.123), will show the front page of the controller with the option of displaying measurements from the meter and also verify the meter's connection.

MultiPower (M850)

Meter Data	
Model	850
Serial Number	1105191402
Firmware version	2.010
System Voltage	280.0
System Current	5.000
LAN (static IP)	
IP Address	192.168.92.123
Network Mask	255.255.255.0
Default Gateway	192.168.92.254
MAC Address	04.163.80.60.142

Use a Telnet application to change settings
(available on request)

MultiPower (M850)

System			
Measurements			
VL1L2:	398.5	kWsum:	503.4
VL2L3:	398.0	kVAsum:	547.2
VL3L1:	398.7	kVArsum:	204.9
V1N:	230.1	PFavg:	0.920
V2N:	229.8	kWh:	3427
V3N:	230.2	kVArh:	296
I1:	801.5	Hz:	60.05
I2:	780.6	kWd:	435.6
I3:	796.8	kVAd:	503.2
NI:	23.4	Ad:	758.4
kWdMax:	387.3	kVAdMax:	684.5
AdMax:	768.9		

Notes: