# **Meoptix** T/Guard-408 – Quick Start Guide

This short form guide deals with the basic operation of your new T/Guard-408 instrument. Here, you will find information about preparing the unit and doing initial measurements. The detailed reference instructions are given in the T/Guard-408 User Guide, document # G1044Rxx.

Your new T/Guard comes calibrated and ready to use. Connect it to a suitable AC supply (85-240 VAC). Although the unit does have a power switch, it should come on after about 25 seconds. The display should look like this:



The next step will depend on the model you have, either the 408 or the Ethernet 408 versions. With the 408 version, we will assume that your connection to a PC will be done via the RS-485 serial port; with the 408-Ethernet version, we will assume that you will use the Ethernet link. With the 408 version, follow the instructions given below; for the 408-Ethernet, see section "Setting up a private network" below.

## Using the RS-485 serial port (408)

The standard interface on the T/Guard 408 is a RS-485 port, not a RS-232 port. You will probably need a converter, either a RS-232 to RS-485 converter or a USB to RS-485 converter; the latter is recommended (Neoptix part number NXP-341). Make sure your serial interface and the software OptiLink-II<sup>1</sup> are ready to use. The Neoptix communication mode must be active, and Modbus must be disabled; to assure that this is the case, press the "MENU" button 9 times, until you see Price; then press "OK", and this neoptimes, until for shown, click the up key to select neoptimes, then press the "OK" key again to save this selection; this will return you to Price. Start OptiLink-II, and the following screen should show:



Select your COM port, and click "Connect"; the following window will open after a few seconds:



If you click "Acquire Temperatures" for an 8-channel system, you will get this window:



This completes your installation. From here, you can configure your relays, optical channels, download files, etc. Refer to the G1044 user guide for further information.

## Setting up a private network (408-Ethernet)

This section includes information on how to set the network parameter, using a static IP address (private network); see the User Guide for other network topologies. Here, you will connect your PC directly to the T/Guard 408 using a 'crossover' Ethernet cable (if using a recent PC (less than ~5 years), a crossover cable may not be required, as newer PCs have Ethernet interfaces that can auto-detect Ethernet signal flow direction), as illustrated in this figure:



If you are using the 100 Base-FX fiber option, then you must enable this option using the keypad: click the MENU button 10 times, until you see EHHE; then press 'OK'. Make sure 'FX' is enabled.

We will assume here that the IP address of your computer Ethernet interface will be set to 10.0.0.3 and the IP address of the T/Guard will be 10.0.0.4. Initially, the IP address is fixed at 10.0.0.4; if you want to change it or to enable the DHCP server mode (dynamic address scheme), you will first have to connect at the fixed 10.0.0.4 address and then perform the changes you want via the web server interface. So we will first confirm that this address is correctly: Click the MENU button 10 times, until you see EFHE; then press 'OK', and FP will flash; the IP address will be shown flashing. You must use this IP address to connect, and you will later be able to make any changes using the web server pages.

Next, you need to make sure your PC computer is also set to work with a static IP address, which should be 10.0.0.3. For this, you need to open the Windows Local Area Network window, as shown here:

Seneral		
Connection		
IPv4 Connectivity:		No Internet access
IPv6 Connectivity:		No network access
Media State:		Enable
Duration:		01:30:5
Speed:		100.0 Mbp
Details		
Activity		
Se	ent —	Received — Received
Bytes: 2	,112,474	3,174,33
Properties 🔫	<u>D</u> isable	Diagnose

<sup>&</sup>lt;sup>1</sup> Warning: there exist 2 versions of OptiLink-II, according to your Windows Operating System; please make sure you install the one that fits your PC computer.

Local Area Connection 3 Properties  Networking Sharing
Connect using:
ASIX AX88772 USB2.0 to Fast Ethemet Adapter
Configure
This connection uses the following items:
Berle and Printer Sharing for Microsoft Networks + Pure Networks Device Discovery Driver + Pure Networks Wreless Driver + Internet Protocol Version 6 (TCP/IPK6) + Internet Protocol Version 6 (TCP/IPK6) + Link-Layer Topology Discovery Mapper I/O Driver + Link-Layer Topology Discovery Responder + Install. Uninstall Procestes
Local Local Toperate Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks. OK Cancel

And then open the Properties window. Highlight 'Internet Protocol Version 4' and click Properties; you should get the following window. Select the 'Use the following IP address' button, and enter the information as shown in the second figure, below:

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You can get IP settings assigned auto this capability. Otherwise, you need to for the appropriate IP settings.	
Obtain an IP address automatica	ly
O Use the following IP address:	
IP address:	
Subnet mask:	
Default gateway:	
Obtain DNS server address autor	natically
Use the following DNS server add	dresses:
Preferred DNS server:	
Alternate DNS server:	
Validate settings upon exit	Ad <u>v</u> anced
	OK Cancel
	OK Cancel
ernet Protocol Version 4 (TCP/IP)	
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You can get IP settings assigned aut apports this capability. Otherwise, y administrator for the appropriate P / O gbtain an IP address automatic O Uge the following IP address: IP address: Sybnet mask: Default gateway: O Obtain DMS server address auto	r4) Properties       pomatically if your network       uu need to ask your network       settings.       ally       10     0     0       255     255     0       .     .     .       omatically     .     .
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Close all windows, by clicking 'OK'.

If you have problems connecting to the Ethernet, or understanding the parameters described above, you should contact your Local Network Administrator for help.

You may have to do a reboot of your PC at this point, if you believe all your parameters are OK, and you still cannot connect to the 408.

#### Working with the Internet browser

Start your compatible web browser. In the address bar, enter '10.0.0.4'. The first page you will see is the Log-In page, as follows (8-probe system shown):

QUALITE	IOL.		
	Websers in No. 488 T/S		
	Unertaine.		
	Passante		
		(Chaterit (c))	
		Ell Acases (11)	

The default username and password are 'neoptix' and 'pass'. This will give you access to the T/Guard-408 home page:

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• 508a	,-	23.8°C	,-	
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		ouble afrei	Loured 23.0	Change (Change 2)
	Notek 4007-9-91-010 Serial number: XXXXXA		tempsrature:	

By default, all parameters have preset values that are normally compatible with power transformers. You are free to change any parameters as you wish; however, for now it is suggested to leave all parameters to their default values.

Feel free to experiment with the various web pages. Enjoy!

#### Time zone setting

To comply with smart protocols, all T/Guard-408 models use a time zone setting. When shipped, it is set to time zone # 567, which corresponds to UTC time. To set it for your region:

- 408: use serial command "wz" (see user guide for list of 569 possibilities) (hint: Canada/Eastern is # 360).408-Ethernet: use web page 'Time setup'.
- Command format: "wz:xxx", where xxx is the code corresponding to your time zone.

### Other information

If you want to use the OptiLink-II software with the T/Guard 408-Ethernet , you will need to connect your PC through the RS485 serial port, as outlined in the first page of this document. The use of the former NeoLink (or OptiLink) software is not recommended any more.

This concludes this short form user guide.

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