

UNICOM™ III Probe

Introduction

The UNICOM III probe is a portable optical (infrared) communications device that transfers digital information between electronic meters and reader/programmer equipment. Two basic configurations of probes are available. One is compatible with the mechanical and optical specifications of the ANSI C12.18 standard and the other is compatible with IEC-61107 FLAG port.

Elster Electricity offers the probe with a standard 9-pin serial connector, a USB connector, and other special connectors. See the UNICOM III probe product guide (PG42-1008) or contact Elster Electricity for details on the availability of probes with the special connectors.

▲ WARNING

Use authorized utility procedures to read metering equipment. Dangerous voltages are present. Equipment damage, personal injury, or death can result if safety precautions are not followed.

Never use UNICOM probes in high voltage equipment compartments or where dangerous voltages may be exposed in open connections and terminals. The electrical insulation on UNICOM probes is for low voltage signaling only. Probe insulation is not designed for power line distribution or higher voltages! Equipment damage, personal injury, or death can result if these instructions are not observed and if probe or connecting cord comes into contact with high voltage terminals or bus bars.

Installing the UNICOM III Probe

To begin using the UNICOM III probe (non-USB connector), plug the connector into the appropriate COM port on your computer. Typical meter support software uses either RTS or DTR to turn on the probe power supply. The RS-232 model probe uses either one (but not both) of these signals as its sole power source.

The UNICOM III probe also supports meters that use a variant to the ANSI C12.18 Tx signal. To communicate with these meters, the meter support software uses RTS to signal the probe to turn on and DTR to signal the probe to invert the Tx digital logic for the optical signal. In this situation only, both RTS and DTR should be turned on. For probes with special connectors for third party hardware, the Tx digital logic is inverted when DTR is asserted regardless of the external state of RTS. These probes are directly powered by the third party hardware power supply. RTS is asserted internally by the third party hardware power supply.

The UNICOM III probe has an internal wire jumper between DTR and DCD. This connection is the probe signature. Some meter support software uses this jumper to determine which COM port has the connected probe. Also, the UNICOM III probe asserts the DSR signal which some meter support software uses to determine that the probe is powered.

Make sure to configure your meter support software to use the correct COM port for the probe.

(continued)

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For USB-connected UNICOM III Probe

Before you can begin using the UNICOM III probe with the USB connector, you must download and install the device driver.

To obtain the most current driver:

1. Use your Web browser to open Elster Electricity's Web site (<http://www.elsterelectricity.com>).
2. Download the UNICOM III probe USB driver from the downloads page or the UNICOM III product page to a folder of your choice.

Note: Contact Elster Electricity Technical Support if you experience problems in downloading the device driver.

Note: The UNICOM III Probe Product Guide (PG42-1008) is also available on the UNICOM III Probe product page.

3. Extract the device driver files to a folder of your choice.

Installing the USB Device Driver

1. Connect the UNICOM III probe to the appropriate USB connection on your computer.
2. Windows® should recognize the connection of new hardware and start the *New Hardware Wizard*.
3. To install the device drivers, follow the directions of the *New Hardware Wizard*.

Make sure to configure your meter support software to use the COM port number assigned to the probe. It is recommended to use the same USB port each time you attach the probe. Using another USB port for the probe will require you to install the USB device driver again. A different COM port number will then be assigned.

Technical Support

If you experience problems and have questions, please contact Customer Support at:

- +1 800 338 5251 (US Technical Support)
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