

PowerLogic® ION7300 Series

Power and Energy Meter

Advanced Field Retrofit Instructions

August 2006



Danger



This symbol indicates the presence of dangerous voltage within and outside the product enclosure that may constitute a risk of electric shock, serious injury or death to persons if proper precautions are not followed.

Caution



This symbol alerts the user to the presence of hazards that may cause minor or moderate injury to persons, damage to property or damage to the device itself, if proper precautions are not followed.

Note



This symbol directs the user's attention to important installation, operating and maintenance instructions.

Service Considerations

Service of the ION7300 series meter should only be performed by qualified, competent personnel that have appropriate training and experience with high voltage and current devices. The meter must be installed in accordance with all local and national electrical codes.

DANGER

Failure to observe the following instructions may result in severe injury or death.

- ◆ During normal operation of the ION7300 series meter, hazardous voltages are present on its terminal strips, and throughout the connected potential transformer (PT), current transformer (CT), digital (status) input, control power and external I/O circuits. PT and CT secondary circuits are capable of generating lethal voltages and currents with their primary circuit energized. Follow standard safety precautions while performing any installation or service work (i.e. removing PT fuses, shorting CT secondaries, etc).
- ◆ The terminal strips on the meter base should not be user-accessible after installation.
- ◆ Do not use digital output devices for primary protection functions. These include applications where the devices perform energy limiting functions or provide protection of people from injury. Do not use the ION7300 series in situations where failure of the devices can cause injury or death, or cause sufficient energy to be released that can start a fire. The meter can be used for secondary protection functions.
- ◆ Do not HIPOT/Dielectric test the digital (status) inputs, digital outputs, or communications terminals. Refer to the label on the ION7300 series meter for the maximum voltage level the device can withstand.

CAUTION

Observe the following instructions, or permanent damage to the meter may occur.

- ◆ The ION7300 series meter offers a range of hardware options that affect input ratings. The ION7300 series meter's serial number label lists all equipped options. Applying current levels incompatible with the current inputs will permanently damage the meter.
- ◆ The ION7300 series meter's chassis ground must be properly connected to the switchgear earth ground for the noise and surge protection circuitry to function correctly. Failure to do so will void the warranty.
- ◆ Terminal screw torque: Barrier-type (current, voltage, and relay terminal screws: 1.35 Nm (1.00 ft-lbf) max. Captured-wire type (digital inputs/outputs, communications, power supply: 0.90 Nm (0.66 ft.lbf) max.

FCC Notice

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

The Ringer Equivalence Number (REN) for the ION7300 series optional internal modem is 0.6. Connection to the ION7300 series internal modem should be made via an FCC Part 68 compliant telephone cord (not supplied). The ION7300 series cannot be used on a public coin phone service or party line services.

Network Compatibility Notice for the Internal Modem

The internal modem in meters equipped with this option is compatible with the telephone systems of most countries in the world. Use in some countries may require modification of the internal modem's initialization strings. If problems using the modem on your phone system occur, please contact Schneider Electric Technical Support.

Standards Compliance



CSA: Certified to CAN/ CSA C22.2 No.1010-1 Certified to UL 3111

Made by Power Measurement Ltd.

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Covered by one or more of the following patents:

U.S. Patent No's 7010438, 7006934, 6990395, 6988182, 6988025, 6983211, 6961641, 6957158, 6944555, 6871150, 6853978, 6825776, 6813571, 6798191, 6798190, 6792364, 6792337, 6751562, 6745138, 6737855, 6694270, 6687627, 6671654, 6671635, 6615147, 6611922, 6611773, 6563697, 6493644, 6397155, 6236949, 6186842, 6185508, 6000034, 5995911, 5828576, 5736847, 5650936, D505087, D459259, D458863, D443541, D439535, D435471, D432934, D429655, D427533.

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Before You Begin

DANGER

During normal operation of the meter, hazardous voltages are present which can cause severe injury or death. These voltages are present on the terminal strips of the device and throughout the connected potential transformer (PT), current transformer (CT), status input, relay, and control power circuits. Only qualified, properly trained personnel should perform installation and servicing.

Before performing any service on the meter:

- ◆ Familiarize yourself with the steps in this guide.
 - ◆ Read the safety precautions on the “Service Considerations” page.
 - ◆ Complete the following steps before attempting any retrofits.
1. Turn off **ALL** power to the meter.
 2. Open all PT fuses (or direct voltage input fuses).
 3. Close all CT shorting blocks.
 4. Ensure that all cables still connected to the meter are **NOT** live.

CAUTION

The components inside the meter are extremely sensitive to electrostatic discharge. To prevent damage to the unit, wear an anti-static wrist strap at all times when working inside the unit. Failure to use proper equipment during servicing will void the ION7300 series meter’s warranty.

Recommended Tools

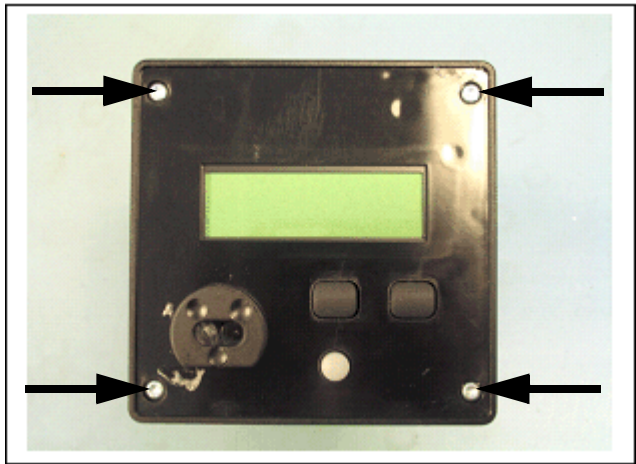
- ◆ Phillips screwdriver (for barrier-type connectors)
- ◆ Precision flat-head screwdriver (for captured-wire connectors)
- ◆ T-10 Torx screwdriver (for meter case screws)
- ◆ Blade knife

Replacing the Display Board and Bezel

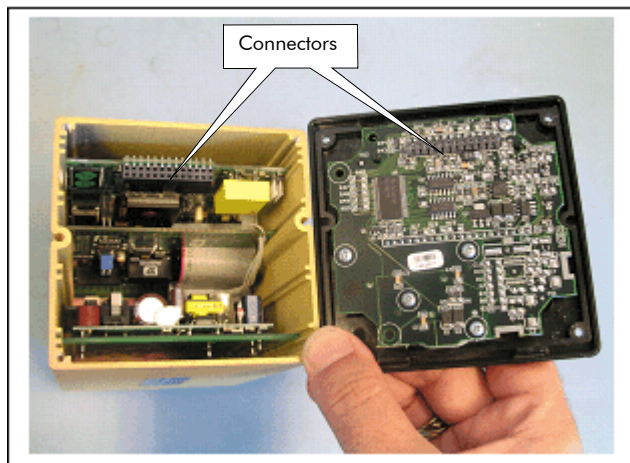
1. Remove your old front panel label with a blade knife.



2. Remove the Torx-head screws from each corner of the bezel (see arrows below).



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3. Disconnect and remove the old front bezel and display assembly from the meter.



4. Connect and attach the new front bezel and display assembly to the meter, using the Torx-head screws.
5. Attach the new front label (provided).

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For further assistance
please contact us at:

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Getting technical support:
Contact your local Schneider Electric sales
representative for assistance or go to the
www.powerlogic.com website.

Electrical equipment should be installed, operated,
serviced, and maintained only by qualified personnel.
No responsibility is assumed by Schneider Electric for any
consequences arising out of the use of this material.

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