Honeywell

E-Mon™ Submeters
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Class 6200 Pulse Output Connection to IDR-ST

Class 6200 includes a 6-pin terminal which has Orange push buttons to help in easy installation. The Orange buttons are parallel to terminal bridge are dedicated for opening-up the respective terminals and making wire connections.

Class 6200 terminals support a maximum cable length of 3,000 feet. Pulse wire characteristics: 1 pair UL Type 600V AC rated insulation, solid copper conductor, unshielded, maximum cable of gauge of 18 AWG. *Do not run the wire from the pulse output in the same conduit as the sensor or line voltage wiring.*

In order to connect Class 6200, to an EMon IDR the IDR must be ordered with the "two-screw" connectors (designated with the suffix ST at the end of the model number) terminals instead of the modular jacks that are used with legacy EMon Pulse meters.

Each Class 6200 meter is interfaced with its **Port 1** pulse output of the meter and input to the IDR through one of its eight plug-in two screw connectors. Correct polarity must be observed for that contact to be recognized. The IDR Left COM terminal of the screw-terminal on the IDR must be connected to the plus (+) Pin 2 of the meter and the Right is the SIG minus (-) of the IDR and is connected to Pin 1 of the meter, see Figure 1 & 2.
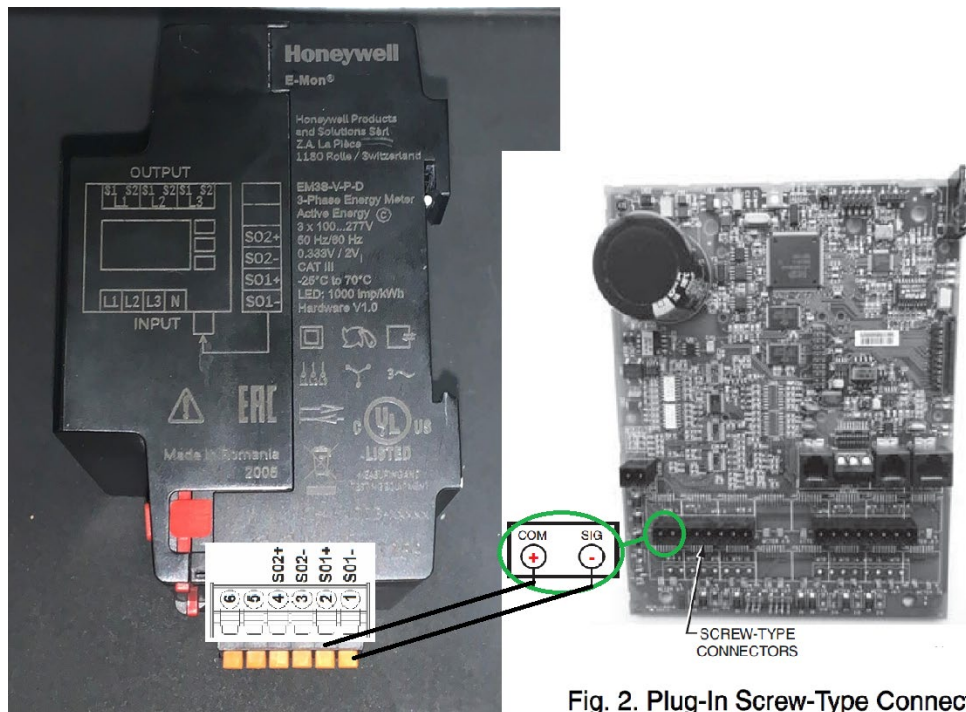

Figure 1. Meter Push-in terminals

Fig. 2. Plug-In Screw-Type Connectors.

Class 6200 Port 1 Pulse Output Interface Specifications

Requires optocoupler with maximum 30V/20mA and 5V with impedance of 100 Ω.

Class 6200 **Port 1** output settings (when using 25 or 50-amp current sensors) support a pulse value of 1 Watt per pulse and a pulse duration of 100 milliseconds.

Navigate to Setup Menu and Press down button to select the Port 1 Menu then enter it and set Pulse Duration equals to 100. Reacts To submenu set to Import

1. Navigate to Setup Menu
2. Press the down button until you get to "Port 1"
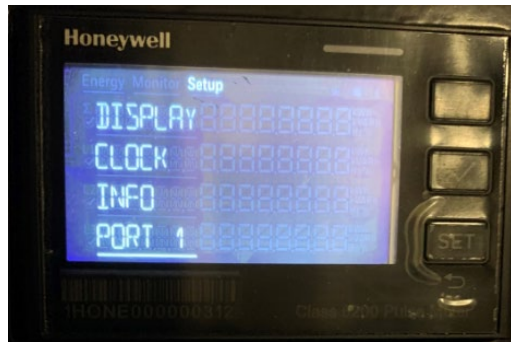
3. Press "Set"
4. Press the down button until you get to "Pulse Duration"
5. Press "Set"
6. Change the pulse duration value to 100, WARNING: please make sure the pulse duration on the meter menu is set at 100ms, as a higher or lower value would cause improper reading.

7. Press and hold the "Set" button until the screen reverts to the previous menu
8. Make sure that the "Reacts To" submenu is set to "Import"

9. Press and hold the "Set" button or wait for the display to timeout and revert to the Home screen

EMon Energy Software Configuration

Example, meter with CS primary of 50 amps uses a Pulse Ratio of 1000 so the EMon Energy software Pulse Value is set to 1-Watt Hr.

Current Sensor Primary Amps	Pulse Duration Milliseconds	Meter Pulse Ratio (# of Pulses per 1 kWh)	EMon Energy Pulse Value
25 A	100	1000	1
50 A	100	1000	1
100 A	100	100	10
200 A	100	100	10
400 A	100	100	10
800 A	100	10	100
1600 A	100	10	100
3200 A	100	10	100
5000 A	100	10	100

Note: IDR Max Pulse Input: <600 pulses per minute / 10 pulses a second equal to 600 pulses per minute