



SPECIALTY DEVICES

EXP EXPANSION BOARDS

DESCRIPTION

The EXP Expansion boards are designed for use with SSI's PMC-1 V5 Pulse-to-Modbus Converter. They are available in 2-input, 4-input or 6-input models, allowing the PMC-1 to be expanded to a total of 4, 6 or 8 input channels respectively. No additional power supply is required to power the EXP boards since they are powered off the PMC-1. The EXP boards connect to the PMC-1's main board by means of a ribbon cable. No configuration is necessary since the PMC-1 can identify which if any of the EXP expansion boards are installed.



Each pulse input provides a nominal +12VDC wetting voltage for the meters' dry-contact output. Upon receiving each pulse from the meter, the PMC-1's microcontroller converts the pulse to the kWh value and adds it to each channel's energy use register. In addition, the accumulated raw pulse count is available for each channel.

Energy use information collected and stored in non-volatile memory and accessible by using the RJ-45 Ethernet connection of the PMC-1.

The EXP boards contain bright red LED lamps which indicate the Pulse input's status at all times.

Typical applications include:

- Provide real-time energy and power measurements for Energy Management Systems, Dashboards, software applications or web clients
- Access, View and Track Energy Use and Demand information
- Generate interval data and load profiles
- Demand Response program monitoring
- Utility submetering (electricity, gas, water, etc.)
- M&V Measurement and Verification of Energy Efficiency Measures
- Utility meter Verification



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SPECIFICATIONS

ELECTRICAL

Power Input:	No power required. EXP boards are powered from the PMC-1 V5
Pulse Input:	Two to Six KY Form A (2-wire) inputs with +12VDC wetting voltage compatible with dry contact or open-collector transistor output. Detachable terminal block.
Maximum Input Pulse Rate:	10 pulses per second
Pulse value:	.001kWh/p to 655.35 kWh/p, in .0001 kWh increments.
Output:	No Hardware outputs; Register reads only
Protocol:	Modbus TCP

