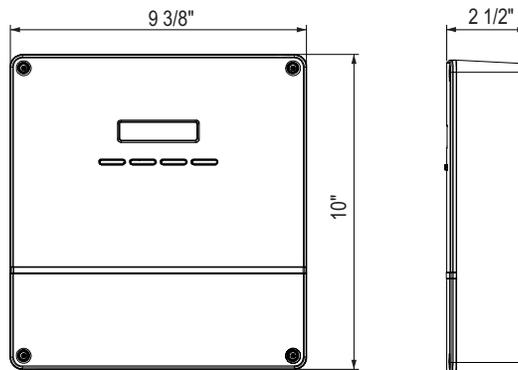


Lennox VRF, Electricity Meter Interface Module (PIM)

Job Name _____	Location _____
Purchaser _____	Engineer _____
Submitted to _____	Reference _____ Approval _____ Construction _____
Unit Designation _____	Schedule # _____

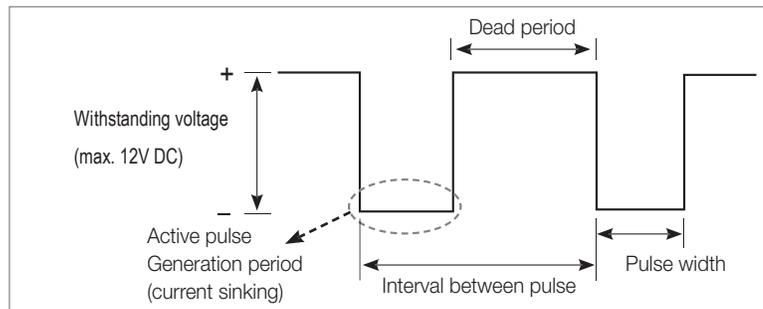
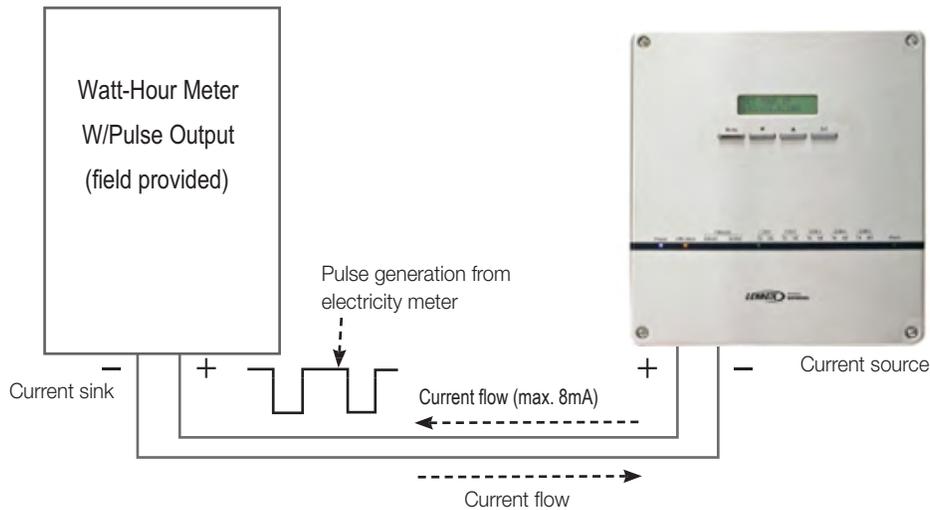
**Specifications**

- Pulse input module (PIM) for Lennox VRF heat pump and heat recovery systems
- Can also monitor pulse signals from water, gas, and electricity meters to monitor consumption from other devices via DMS2, DMS 2.5, or SNET3 interfaces.
- Maximum 8 X pulse-type watt-hour meters (with appropriate CT's) per VCTRL08P-1
- Communicates to the following Lennox controllers/gateways: VCTRL09P-1, VCTRL02P-1 (firmware version 2.6.X and later) to monitor/record energy consumption
- Maximum 8 X VCTRL08P-1 connection to a single Lennox gateway/controller
- Connection of ON/Off Controller, VRF outdoor unit(s)(R1/R2, C1/C2), SNET Mini (MST-S3W) cannot connect to the same channel on a Lennox controller/gateway as VCTRL08P-1
- Energy consumptions data can be reviewed via the following Lennox controllers/gateways: DMS 2.0, DMS 2.5 (VCTRL09P-1), BACnet gateway (VCTRL02P-1), LonWorks Gateway, SNET 3 Software
- DC 12V, 3A power provided by AC/DC adapter (input 110-240VAC 50/60Hz, provided with VCTRL08P-1
- 16 AWG X 2 shielded cable between Lennox equipment and controls is necessary for proper operation
- Connection cable between VCTRL08P-1 and watt-hour meter: unshielded, 16 AWG X 2, maximum 328'
- One watt-hour meter (with appropriate CT's) per input channel on VCTRL08P-1
- One watt-hour meter per outdoor unit (single unit or modular system)
- When monitoring power of indoor equipment, only units (indoor, MSB, EEV kit) on a single system can be monitored per watt-hour meter (multiple refrigerant systems on one watt-hour meter is not allowed)

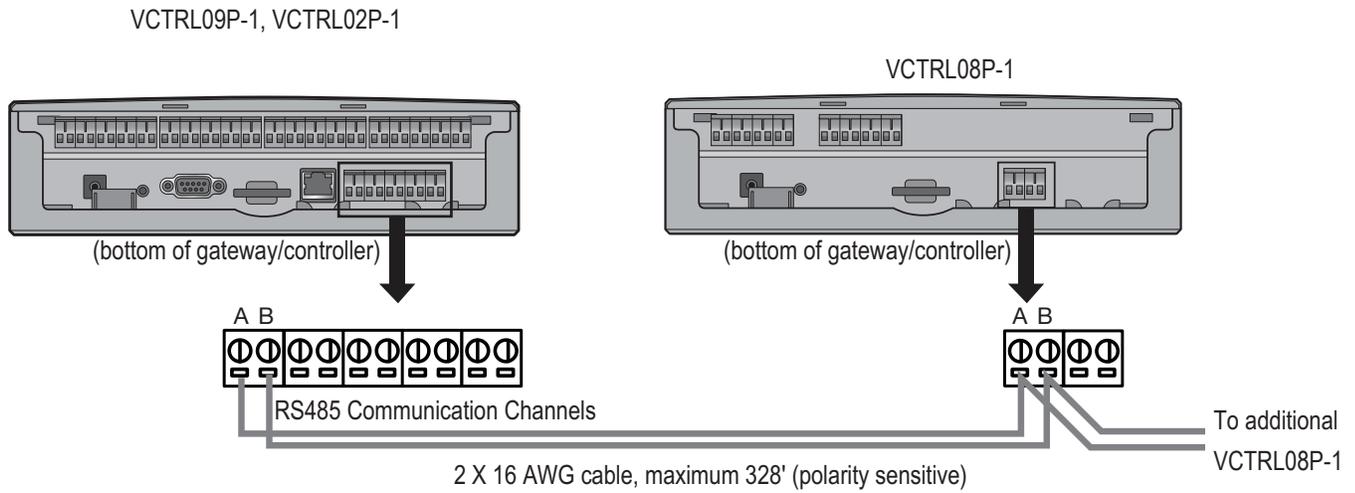


**Watt-hour Electricity Meter Specifications**

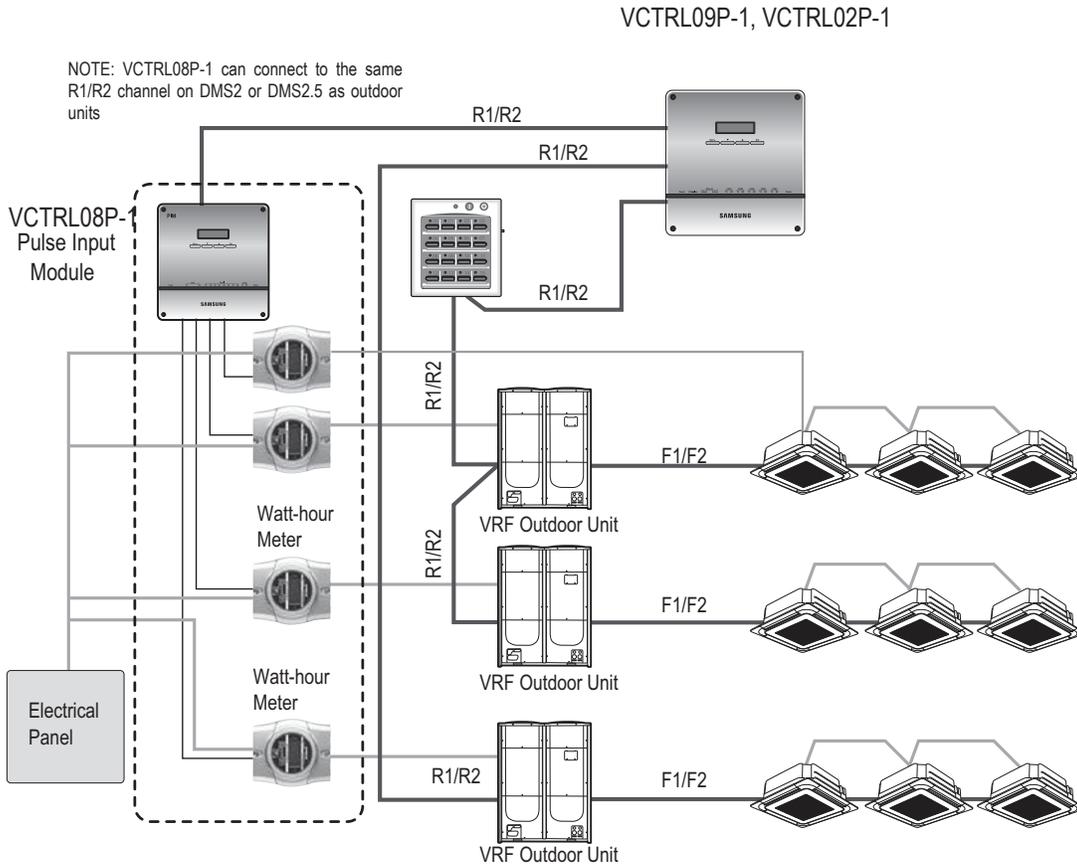
- Current flow on output: current-sinking
- Pulse rate: 1 ~ 10,000 Wh/pulse (no decimal pulse rate allowed for electricity meter input)
- Pulse width: 20 ~ 1,000ms in 1ms units with +/- 5% tolerance (no decimal pulse rate allowed)
- Time interval between pulses: minimum 4ms
- Allowable current sinking: minimum 8mA (applied by VCTRL08P-1)
- Withstanding voltage: minimum 12V DC (applied by VCTRL08P-1)
- Interface circuitry: Electronic isolation circuitry recommended, no voltage output



### Connection of VCTRL08P-1 to Lennox Gateway/Controller



### Basic Installation Example of VCTRL08P-1



The diagrams on this page are for reference only. Refer to installation manual for wiring and installation instructions. Other configurations may be possible.