

GENERAL - The OPP-1i is an optical pulse pickup that uses the meter's infrared calibration pulse to read energy consumed by the building on which the meter is mounted. The OPP-1i uses a PCR-3OPP relay for power, pulse conversion and output isolation. Each time the meter's optical calibration pulse flashes, the OPP-1i picks up the flash and converts it to one Form C (3-wire) pulse on the PCR-3OPP's outputs. Pulses may be counted for energy consumption, or timed to calculate demand. Contact SSI for more information if required.

MOUNTING - The OPP-1i mounts on the meter's face or top, directly in line with the infrared calibration LED, using the suction cup. Carefully align the center of the OPP-1i's suction cup with the meter's calibration LED.

POWER INPUT - The PCR-3OPP is powered by a 120-277VAC. Connect the Hot lead to the **L1** terminal. Connect the Neutral lead to the **NEU** terminal. Connect **GND** to earth ground.

INPUT - Connect the OPP-1i as shown above to the PCR-3OPP's input terminals. Connect the black wire to the "Kin" terminal, the green (alternately white) wire to the "Yin" terminal and the red wire to the "Zin" terminal. Maximum distance between the OPP-1i and the PCR-3OPP's input is 25 feet.

<u>OUTPUTS</u> - Two 3-wire (Form C) isolated "dry-contact" outputs are provided on the PCR-3OPP with output terminals K1, Y1 and Z1 for Output #1 and K2, Y2 and Z2 for Output #2. Internal MOV transient voltage suppression for the solid-state relays is provided.

FUSES - Curent limiting is provided to two automatically resetting solid state fuses, F1 and F2, rated at 150mA.

<u>OPERATION</u> - For each input pulse from the OPP-1i, the output will change state, alternately giving continuity between K1 and Y1 on the first pulse, then K1 and Z1 upon the next pulse. Output 2 is the same. This system is designed for Itron Sentinel or Centron meters that continuously output the calibration pulse using this infrared LED. Care should be taken to insure that high ambient light conditions do not affect the OPP-1i's ability to see the infrared pulse. Shade the meter if necessary from direct sunlight with a dark cloth or other such opaque material. The OPP-1i is best used indoors where sunlight cannot shine on the meter.



SOLID STATE INSTRUMENTS

by Radian Research, Inc 3852 Fortune Dr, Lafayette, IN 47905 Phone: (765) 449-5576

Mail: technicalsupport@radianresearch.com

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