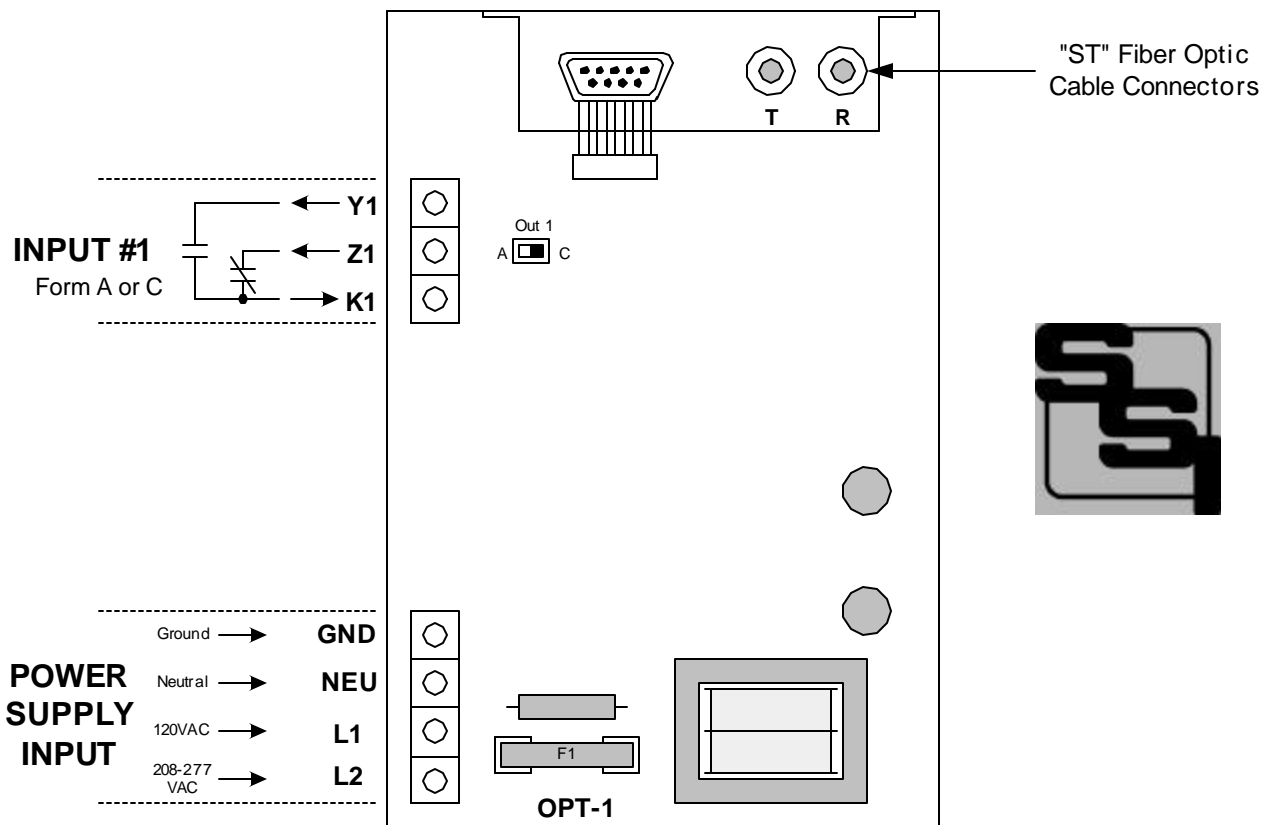


# INSTRUCTION SHEET

## OPT-1 OPTICAL FIBER PULSE TRANSMITTER



**MOUNTING POSITION** - The OPT-1 may be mounted in any position.

**POWER INPUT** - The OPT-1 can be powered by 120VAC or 208 to 277VAC. Connect the GND terminal to the electrical system ground. Connect the Neutral lead to the NEU terminal. Connect the L1 terminal to the 120VAC "Hot" lead for 120VAC operation. Connect the L2 terminal to the 208, 240, or 277 "Hot" lead. **Do not use both L1 and L2. Exercise caution when board is energized. There is voltage present at L1 and L2 when powered.**

**METER INPUTS** - The OPT-1 has one pulse input which can be configured as either 2-Wire (Form A) or 3-Wire (Form C). Connections are K1, Y1, & Z1 and connect to the meter's K, Y, & Z output terminals. For 2-Wire mode, use the **K** and **Y** terminals. For 3-Wire mode, all three wires must be used. The meter's pulse output must be a dry-contact type with NO sourced voltage. The OPT-1 supplies its own wetting voltage to the KYZ pulse output contact of the meter.

**FUSE** - The power supply fuse (F1) supplied on the OPT-1 is 1/2 Amp, type 3AG. Because the power supply voltage terminals are configured as 120V (L1) and 208-277V (L2), the fuse is located in the neutral power supply lead. Voltage may be present on the L1 and L2 terminals and circuitry on the board when the fuse is blown. Care should be exercised to disconnect all power to the board at the circuit breaker before servicing the system.

**GROUND** - The GND terminal on the OPT-1 is a common ground with the chassis and is connected to the Chassis by means of the middle right-hand mounting screw. Therefore, if necessary, the electrical system ground can be connected to the OPT's chassis. Do not tie the Ground and Neutral terminals together.



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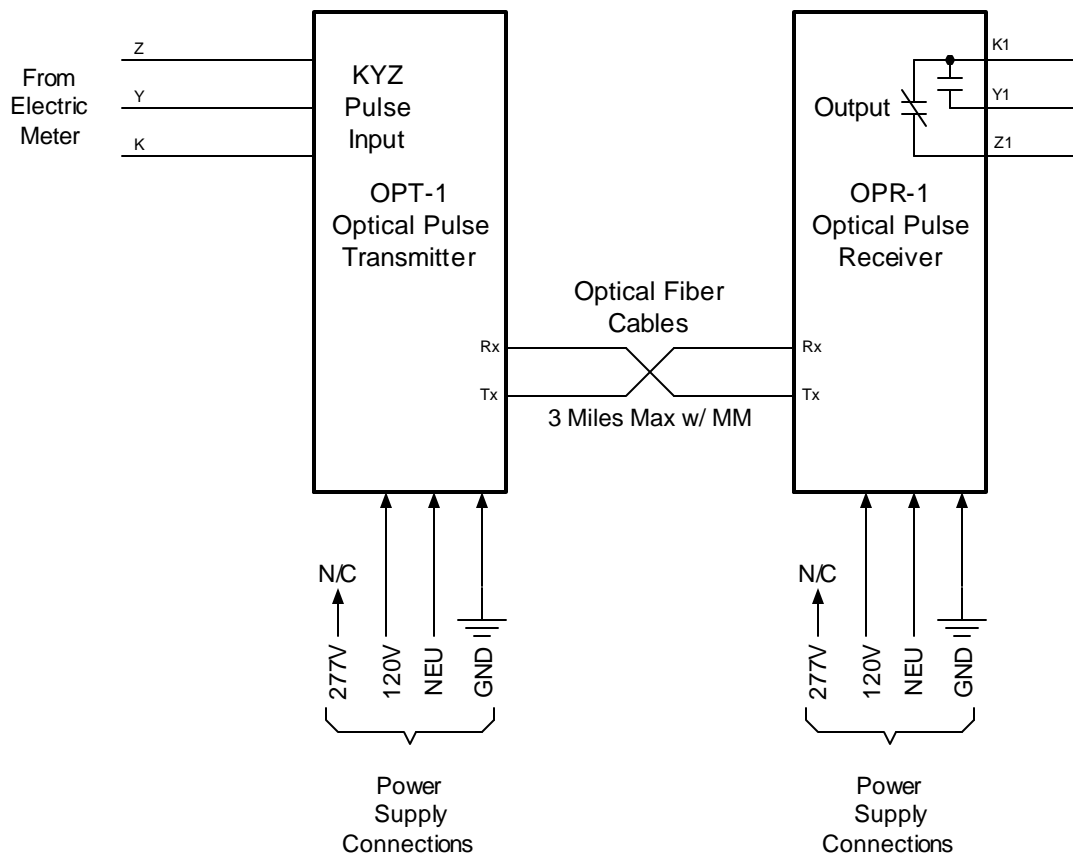
# INSTRUCTION SHEET

## OPT-1 OPTICAL FIBER PULSE TRANSMITTER (con't)

**Fiber Optic Cable Connections** - Locate the two "ST" fiber optic ports on the OPT-1's media convertor module. Connect the fiber optic cable to these ports using the twist lock connections. The cables should be "crossed" such that each cable is connected to the "T" fiber optic port on one end and the "R" fiber optic port on the other end.

The OPT-1 will transmit pulse information to the OPR-1 Optical Fiber Pulse Receiver up to approximately 5000 meters or about 3 miles using multimode fiber. Care should be taken to follow all proper fiber optical cable implementation standards.

### OPL SYSTEM BLOCK DIAGRAM



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