



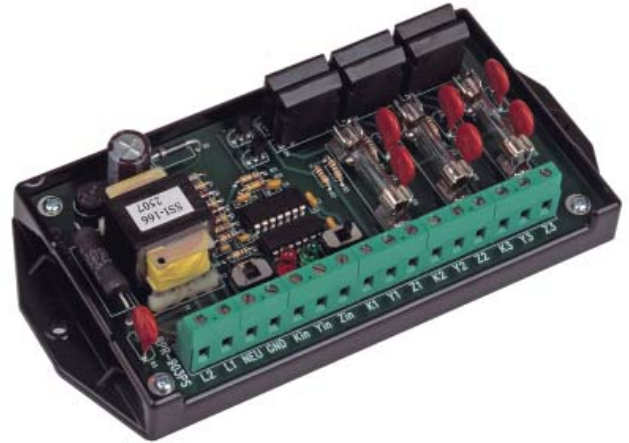
SSI ELITE

# RPR-903PS PULSE ISOLATION RELAY

FORMERLY THE RPR-903

## DESCRIPTIONS

The RPR-903PS pulse isolation relay provides three isolated solid state Form C (K, Y, & Z) contacts from a field-selectable Form A or C inputs. The RPR-903PS' input supplies its own sense voltage to the pulse sending unit(s), usually an electric meter's pulse initiator. The RPR-903PS has two fixed Form C outputs. In addition, the third output features two field-selectable modes, Normal mode or Pulse Doubling mode. In the Pulse Doubling mode the output provides a true Form C to Form A pulse value conversion.



Typical applications include interfaces between utility metering devices and customer-owned energy control systems, demand recorder applications, or supervisory control systems (SCADA) interfaces.

The RPR-903PS relay is designed to filter noise and transients from its input to prevent any false pulses at its output. Bright red and green LED Indicators Display the system's status at all times thus allowing a rapid visual check of the system's performance without requiring any additional test equipment.

The RPR-903PS' input and output circuit's terminal strip connector is a "Euro" type, providing excellent insulation from live electrical contacts. Each "K" lead of the RPR-903PS' outputs is fused to prevent damage to the relay under almost any condition a user might cause such as excessive current, incorrect wiring, etc. The RPR-903PS' robust solid state switching device is rated at 800V at 750mA giving maximum protection from lightning or transient voltage damage. Its built-in transient protection for the solid state switch contacts eliminates the need for external or off-board transient suppression devices. All component parts that have power applied to them, with the exception of the input/output terminal strip are enclosed in a polycarbonate cover for maximum protection. The mounting base plate is also made of polycarbonate and offers excellent electrical insulation between the circuit and the mounting surface.

### FUNCTIONAL SUMMARY

|      | IN          | OUT                            |
|------|-------------|--------------------------------|
| #    | 1           | 3                              |
| TYPE | 2 or 3 Wire | (2) 3 Wire,<br>(1) 2 or 3 Wire |
| FORM | A or C      | C, A or C                      |

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### SPECIFICATIONS

#### ELECTRICAL

|                                 |                                                                                                                                                                                                                                                                              |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Power Input:                    | 120, 208-277 VAC. Burden: 10 mA at 120 VAC                                                                                                                                                                                                                                   |
| Pulse Input:                    | Form A or C field-selectable +13VDC wetting voltage supplied to meter.                                                                                                                                                                                                       |
| Pulse Output:                   | Three sets of Form C dry contacts (K, Y & Z) for energy pulses, two fixed and one field-selectable Form A or C. The solid state "no bounce" relay contacts are rated at 250 VAC/VDC @ 1/2 Amp. The maximum rating of the contacts is 100 VA. Factory fused at 1/2 amp. (3AG) |
| Contact On-State Resistance:    | 2.3 ohms maximum, 1.7 ohms typical                                                                                                                                                                                                                                           |
| Insulation Resistance:          | 50 megohms typical                                                                                                                                                                                                                                                           |
| Operate and Release Time:       | Turn-on time - 8 mS typical, 20mS MAX<br>Turn-off time - 1 mS typical, 5mS MAX                                                                                                                                                                                               |
| Input/Output Isolation Voltage: | 2500Vrms                                                                                                                                                                                                                                                                     |

#### MECHANICAL

|           |                                    |
|-----------|------------------------------------|
| Mounting: | Any position                       |
| Size:     | 3.50" wide, 7.20" high, 1.50" deep |
| Weight:   | 12 ounces                          |

#### TEMPERATURE

|                    |                                       |
|--------------------|---------------------------------------|
| Temperature Range: | -38° C to +85° C, -36.4° F to +158° F |
| Humidity:          | 0 to 98% non-condensing               |

#### AVAILABLE OPTIONS

|                 |                      |
|-----------------|----------------------|
| Input Voltages: | 24 VAC/24VDC, 125VDC |
|-----------------|----------------------|