



REGISTERS/TOTALIZERS

MPT-2 METERING PULSE TOTALIZER

DESCRIPTION

The MPT-2 Metering Pulse Totalizer is designed to provide the totaled pulse values from two 3-Wire Form C input pulse sources. Two 3-wire Form C (K, Y, & Z) outputs from isolated dry solid state relay contacts are provided. Inputs are additive. Typical applications include interfaces between utility metering devices and customer-owned energy control systems, demand recorder applications, and supervisory control systems (SCADA) interfaces. The MPT-2 pulse totalizer may also be used as a pulse value translator if it is desirable to translate odd pulse values such as 0.1234 KWH/pulse to an even value, 0.5000 KWH/pulse. The pulse signal inputs to the MPT-2 is by two sets of "Y" & "Z" leads with a common "K" lead.



The MPT-2 provides a sense voltage of +13VDC to the two sending source contacts, normally a two meters. The MPT-2's inputs have a different four digit weighted value which can be set between the value of 0000 to 9999. The output value setting is a six digit number between 000000 to 999999. Both the input and output values may be field set without the use of any external devices. In addition, the minimum time between output pulses may be set in 10 milliseconds increments between 20 milliseconds and 1000 milliseconds.

An LCD display contained within the unit displays the status of each of the inputs and the output as a Y or Z when not being used in the setting of the pulse multiplier values. Within the software all inputs are first checked for the correct sequence and then a minimal time of contact closure duration to assure a maximum noise rejection. The "K" lead of the MPT-2's output is fused to prevent damage to the relay under almost any conditions a user might cause such as excessive current, incorrect wiring, etc.

The MPT-2 has built-in MOV transient protection for the solid state relay contacts which eliminates the need for external or off-the-board transient suppressors. All component parts of the MPT-2, which 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.

MPT-2

FUNCTIONAL SUMMARY

	IN	OUT
#	2	2
TYPE	3 Wire	3 Wire
FORM	C	C



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SPECIFICATIONS

ELECTRICAL

Power Input:	120, 208-277 VAC. Burden: 4 mA at 120 VAC
Pulse Input:	Two 3-wire Form C inputs. "K" terminal are common return from meter; "Y" and "Z" terminals are pulled-up to a sense voltage of +13 VDC. Compatible with dry-contact mechanical, electro-mechanical or semiconductor outputs (i.e. open connector transistor or MOSFET transistor).
Pulse Output:	One dry Form C contact (K, Y, & Z) for energy pulses. Factory fused at 1/2 Amp with 3AG fuses. MTwo sets of dry Form C contacts (K, Y, & Z) for energy pulses rated at 100mA at 240VAC rms, 400V peak. Factory fused at 1/10 Amp with 3AG fuses.
Contact On-State Resistance:	25 ohms maximum, 18 typical
Insulation Resistance:	50 megohms typical
Operate and Release Time:	1 to 2 milliseconds typical
Input/Output Isolation Voltage:	2500Vrms

MECHANICAL

Mounting:	Any position
Size:	3.50" wide, 7.20" high, 1.50" deep
Weight:	13 ounces

TEMPERATURE

Temperature Range:	-38° C to +70° C, -36.4° F to +158° F
Humidity:	0 to 98% non-condensing

OPTIONS

Input Voltages:	Contact Factory
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