

Pulse Input Processor/FTA

MU-PPIX02

Parameters	Specification
FTA Models	MU-TPIX12, TPIX52
Sensor Inputs	Self-powered 2-wire PM/APM/HPM-powered (with automatic current limiting) 3-wire Pulse voltage or contact input
Input Type	Rectangular or sine waves
Input Channels	8
Input Impedance	10 k Ω minimum
Input Frequency ⁽¹⁾ 50% Duty Cycle Square Wave Sine Waves	1 Hz to 20 kHz (all channels same amplitude) 1 Hz to 20 kHz
Pulse Levels Low High	-0.5 V to +1.9 V +3.5 V to +24 V (Hysteresis prevents change between 1.9 V and 3.5 V)
Pulse Width (On/Off Dwell) High and Low	25 μ s minimum at 20 kHz (with IOP filter jumper in storage position) 50 μ s minimum at 10 kHz (with IOP filter jumper in H position) 500 μ s minimum at 1 kHz (with IOP filter jumper in L position)
Contact Current Low (0, Field contact closed) High (1, Field contact open)	23 mA maximum (with FTA Pullup) ⁽²⁾ 20 mA maximum (with FTA Pullup) ⁽²⁾
Contact Resistance Low (0, Field contact closed) High (1, Field contact open)	82 Ω maximum (with FTA Pullup) ⁽²⁾ 175 Ω minimum (with FTA Pullup) ⁽²⁾
Field Input Scan Rate	20 ms
AV Update Rate (Used for Totalizer Algorithm)	20 ms
PV Update Rate	500 ms for 8 channels
Rate Accuracy	\pm 0.01% of input frequency, \pm 0.4 Hz (whichever is larger)
Rate Resolution	\pm 0.4 Hz
Input Range (No Damage)	\pm 30 V maximum
Transmitter Power Conditioning (for 3-wire connection) Open Circuit Voltage Full Load Short Circuit Current	23-25 Vdc 21 V @ 115 mA 150 mA maximum
<p>(1) Sine waves must not be intermixed with square waves or contacts on the same FTA. 50 M FTA cables with mixed signal amplitudes: frequency is 9 kHz maximum (55 μs minimum pulse width) 30 M FTA cables: frequency is 13 kHz maximum (38 μs minimum pulse width) 20 M FTA cables: frequency is 15 kHz maximum (33 μs minimum pulse width) 10 M FTA cables: frequency is 18 kHz maximum (28 μs minimum pulse width) 5 M FTA cables: frequency is 20 kHz maximum (25 μs minimum pulse width)</p> <p>(2) 1 kΩ to 24 Vdc.</p>	