



## ZX020

### Programmable miniature counter with pulse inputs (A, B)

#### Product Features:

- Diverse counting modes (e. g. event, difference, summing or position)
- Two incremental inputs for HTL NPN / PNP signals
- Maximum input frequency 15 to 60 kHz (depends on counting mode)
- Selectable filter for use with mechanical inputs
- 10 to 30 VDC power supply
- Miniature panel housing (1.889 x 0.9449 inch)
- LED display with 6 digits
- Display range -199 999 to 999 999
- Adjustable scaling factor and decimal place
- Easy to set up by menu support
- Protection class IP65 (front side)

Technical Specifications:			
<b>Power supply:</b>	Input voltage:	10 ... 30 VDC	
	Protection circuit:	reverse polarity protection	
	Consumption:	max. 50 mA	
<b>Connections:</b>	Type of connection	screw terminal, 1.5 mm <sup>2</sup> / AWG 16	
<b>Incremental input:</b>	Characteristic:	NPN / PNP / Namur	
	Switching levels:	LOW: 0 V ... 0.2 x power supply voltage HIGH: 0.6 x power supply voltage ... 30 V	
	Channels:	A, B and Set/Reset	
	Counting frequency:	15 ... 60 kHz (depends on selected counting mode)	
	Pulse form:	arbitrary (Schmitt-Trigger)	
	Internal resistance:	R <sub>i</sub> ≈ 10 kOhm	
	Pulse time (Set/Reset):	min. 5 ms	
<b>Max. Counting Frequency:</b> (depending on operating mode and supply voltage)	<b>Mode</b>	<b>24 VDC supply</b>	<b>12 VDC supply</b>
	CntDir	60 kHz	20 kHz
	Up-Down	25 kHz	15 kHz
	Up-Up	25 kHz	15 kHz
	Quad	25 kHz	15 kHz
	Quad2	25 kHz	15 kHz
	Quad4	15 kHz	15 kHz
<b>Power down memory:</b>	Data retention:	10 years	
	Storage Cycles:	10 <sup>6</sup>	
<b>Display:</b>	Type:	6 digit LED, red	
	Digit height:	8 mm / 0.3149 inch	
	Range:	-199 999 ... 999 999	
<b>Housing:</b>	Material:	plastic	
	Mounting:	panel	
	Dimensions:	cut out (w x h): 45 x 22 mm / 1.772 x 0.866 inch outer dimensions (w x h x d): 48 x 24 x 59 mm / 1.889 x 0.9449 x 2.323 inch	
	Miscellaneous:	additional bezels for clip or screw mounting are included in the delivery	
	Protection class:	front: IP 65 / rear: IP20	
	Weight:	approx. 50 g	
<b>Ambient temperature:</b>	Operation:	-20° ... + 55° C / -4° ... 131° F (not condensing)	
	Storage:	-25° ... + 70° C / -13° ... 158° F (not condensing)	
<b>Konformität &amp; Normen:</b>	EMC 2004/108/EC:	EN 61000-6-2, EN 61000-6-3, EN 61000-6-4	
	RoHS 2011/65/EU:	EN 50581	