



## IT210

Level Converter, Direction Signal Decoder and programmable pulse divider

### Product features:

- Level Converter (RS-422, HTL Single Ended, HTL Differential, TTL and vice-versa)
- Implementation between the two types of representations for the direction of rotation (A/B 90 °, A/B Direction and vice versa)
- Adjustable division ratio of directional A / B pulses
- Adjustable division ratio for the Z pulse
- Reset of the Z divider by external input (defined setting)
- Zero setting of the A / B / Z divider by external input (defined Start / Stop)
- Z divider can also be used as an independent second divider
- Limit frequency up to 1 MHz, depending on the input format
- Push-pull outputs direct SPS control
- 9 to 30 VDC power supply

Technical Specifications		
<b>Connections:</b>	Connector type:	screw terminal, 1.5 mm <sup>2</sup> / AWG 16
<b>Power supply:</b>	Input voltage:	9 ... 30 VDC
	Protection circuit:	reverse polarity protection
	Ripple:	≤ 10 %
	Consumption:	approx. 40 mA (at 9 V, unloaded) approx. 30 mA (at 30 V, unloaded)
<b>Sensor supply:</b>	Output voltage:	+ 5,5 VDC +/- 5 %
	Output current:	max. 250 mA
<b>Incremental inputs:</b>	Number of inputs:	3
	Channels:	A, B, Z (HTL Single Ended, TTL) A, /A, B, /B, Z, /Z (RS422, HTL Differential )
	Configuration:	RS422, HTL Differential, HTL Single Ended, TTL
	RS422:	max. 1 MHz (RS422 difference signal > 1 V)
	HTL Differential:	max. 1 MHz (HTL difference signal > 2 V)
	HTL Single Ended:	max. 350kHz, Level 1: Low 0 ... 10V, High 14 ... 30 V Level 2: Low 0 ... 5V, High 9 ... 30 V
	TTL:	max. 350kHz, Low 0 ... 0.7V, High 2.2 ... 5 V
<b>Control inputs:</b>	Number of inputs:	2
	Format:	HTL, PNP (Low 0 ... 5 V, High 9 ... 30 V)
	Frequency:	max. 20 kHz
	Reaction time:	50 μs
	Load:	max. 3mA
<b>Incremental outputs:</b>	Number of inputs:	3
	Channels:	A, /A, B, /B, Z, /Z
	Signal level:	HTL: 8 ... 29 V (Depending on supply voltage) RS422: 5 V
	Output current:	max. 20 mA / Push-Pull
	Reaction time	ca. 600ns
<b>Housing:</b>	Material:	plastic
	Mounting:	35 mm top hat rail (according to EN 60715)
	Dimensions (w x h x d):	22,5 x 102 x 102 mm / 0,886 x 4,016 x 4,016"
	Protection class:	IP20
	Weight:	approx. 100 g
<b>Ambient temperature:</b>	Operation:	0 °C ... +60 °C / +32 ... +140 °F (not condensing)
	Storage:	-25 °C ... +70 °C / -13 ... +158 °F (not condensing)
<b>Failure rate:</b>	MTBF in years:	109,3 (long-term usage at 60 °C / 140 °F )
<b>Conformity &amp; standards:</b>	EMC 2014/30/EU:	EN 61326-1: 2013 for industrial location EN 55011: 2016 + A1: 2017 + A11: 2017 Class A
	RoHS ( II ) 2011/65/EU	
	RoHS ( III ) 2015/863:	EN IEC 63000: 2018