



## IT210

Level Converter, Direction Signal Decoder and programmable pulse divider

### Product features:

- Level Converter (RS-422, HTL Single Ended, HTL Differential, TTL and 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>Power supply:</b>	Input voltage: Protection circuit: Ripple: Consumption: Connections:	9 ... 30 VDC reverse polarity protection ≤ 10 % approx. 40 mA (at 9 V, unloaded) approx. 30 mA (at 30 V, unloaded) screw terminal, 1.5 mm <sup>2</sup> / AWG 16
<b>Sensor supply:</b>	Output voltage: Output current: Connections:	+ 5,5 VDC +/- 5 % max. 250 mA screw terminal, 1.5 mm <sup>2</sup> / AWG 16
<b>Control input:</b>	Signal level: Input current: Frequency: Connections:	HTL, $U_L < 5V / U_H > 9V$ approx 3 mA 20 kHz, 50 us screw terminal, 1.5 mm <sup>2</sup> / AWG 16
<b>Incremental inputs:</b>	Signal level: Traces: Frequency: Connections:	RS422, differential voltage > 1 V HTL Differential, differential voltage > 2 V HTL Single Ended, $U_L < 10V / U_H > 14V$ HTL Single Ended, $U_L < 5V / U_H > 9V$ TTL, $U_L < 0.7V / U_H > 2.2V$ A, B, Z (HTL Single Ended, TTL) A, /A, B, /B, Z, /Z (RS422, HTL Differential ) RS422, 1 MHz HTL Differential, 1MHz HTL Single Ended, 350kHz TTL, 350kHz screw terminal, 1.5 mm <sup>2</sup> / AWG 16
<b>Inkremental-Ausgang:</b>	Signal level: Traces: Delay: Output current: Connections:	8 ... 29 V bei HTL (Depending on supply voltage) 5 V at RS422 A, /A, B, /B, Z, /Z Approx. 600ns max. 20 mA / Push-Pull screw terminal, 1.5 mm <sup>2</sup> / AWG 16
<b>Housing:</b>	Material: Mounting: Dimensions (w x h x d): Protection class: Weight:	plastic 35 mm top hat rail (according to EN 60715) 22,5 x 102 x 102 mm / 0,886 x 4,016 x 4,016" IP20 approx. 100 g
<b>Ambient temperature:</b>	Operation: Storage:	0 °C ... +60 °C / +32 ... +140 °F (not condensing) -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 2004/108/EC: 2011/65/EU:	EN 61000-6-(2-4) RoHS