



IT251

Level converter, direction signal decoder and programmable impulse divider

Product Features:

- Level conversion from TTL / RS 422 to HTL 10 ... 30 V and vice versa
- Programmable divider for error-free and position-true division of quadrature encoder signals (A, B, 90°)
- Separate marker pulse divider with individual settings
- 300 kHz of maximum frequency
- Push-pull outputs for direct PLC interfacing
- 18 ... 30 VDC power supply

Technical Specifications:		
Power supply:	Input voltage: Protection circuit: Ripple: Consumption (with unloaded 5.5 V encoder supply): Connections:	18 ... 30 VDC reverse polarity protection ≤ 10 % at 24 VDC approx. 250 mA (at 18 V) approx. 150 mA (at 30 V) screw terminal, 1.5 mm ² / AWG 16
Encoder supply:	Output voltage: Output current: Connections:	+ 5.5 VDC / +/- 5 % max. 130 mA male 9-pin SUB-D connector
Incremental input:	Signal level: HTL internal resistance Channels: Frequency: Connections:	TTL / RS422, differential voltage > 1 V HTL, LOW: 0 ... 4 V / HIGH: 10 ... 30 V R _i ≈ 4.7 kOhm A, B, Z (HTL, asymmetrical) A, /A, B, /B, Z, /Z (TTL / RS422 symmetrical) max. 300 kHz screw terminal, 1.5 mm ² / AWG 16 (HTL) or female 9-pin SUB-D connector (TTL / RS422)
Incremental output:	Signal level: Channels: Output current: Connections:	17 ... 29 V at HTL (depends on power supply voltage) 5 V at TTL / RS422 A, B, Z (HTL, asymmetrical) A, /A, B, /B, Z, /Z (TTL / RS422 symmetrical) max. 20 mA / push-pull screw terminal, 1.5 mm ² / AWG 16 (HTL) and male 9-pin SUB-D connector (TTL / RS422)
Housing:	Material: Mounting: Dimensions: Protection class: Weight:	plastic 35 mm top hat rail (according to EN 60715) 40 x 79 x 91 mm / 1.5748 x 3.1102 x 3.5827 inch (w x h x d) IP20 approx. 200 g
Ambient temperature:	Operation: Storage:	0 °C ... +45 °C / +32 ... +113 °F (not condensing) -25 °C ... +70 °C / -13 ... +158 °F (not condensing)
Failure rate:	MTBF in years:	55.4 a (long-term usage at 60 °C / 140 °F)
Conformity and standards:	EMC 2004/108/EC: Guideline 2011/65/EU:	EN 61000-6-2, EN 61000-6-3, EN 61000-6-4 RoHS-conform