



IP251

Universal SSI - RS232 signal converter for operation with absolute SSI Sensors and Encoders

Product Features:

- Converts SSI data as well as serial data to parallel binary, Gray oder BCD data format
- Linearization facilities by freely programmable in-/output curves
- Additional facilities like bit-blanking, round-loop-operation etc.
- Parallel output 25 bits (push-pull, short circuit proof)
- RS232 interface for serial readout of the sensor data
- SSI: Master or Slave operation
- 18 to 30 VDC power supply

Technical Specifications:		
Power supply:	Input voltage:	18 ... 30 VDC
	Protection circuit:	reverse polarity protection
	Ripple:	≤ 10 % at 24 VDC
	Consumption:	approx. 200 mA
	Connections:	screw terminals, 1.5 mm ² / AWG 16
Encoders / sensors:	Usable types:	absolute encoders (single-turn, multi-turn or comparable)
	Interface:	SSI (6 ... 25 Bit binary- or Gray code)
	Encoder supply:	external input necessary, voltage depends on the used encoder type
SSI input:	Input format:	TTL differential, RS422-standard
	Frequency range:	100 Hz ... 1 MHz
	Standard resolutions:	13, 21 or 25 Bit (selectable)
	SSI interval time:	min. 4 x clock
	Operational modes:	master or slave (selectable)
	Connections:	screw terminals, 1.5 mm ² / AWG 16
Control input:	Input logic	PNP, active high / low (reversible via PC)
	Signal levels:	LOW: 0 ... 3 V, HIGH: 10 ... 30 V
	Function:	hold
	Signal delay time:	approx. 500 μs
	Internal resistance:	R _i ≈ 5 kOhm
	Connections:	screw terminals, 1.5 mm ² / AWG 16
Parallel output:	Output format:	Binary, Gray or BCD
	Resolution:	25 bit
	Signal levels:	0 ... 35 V * (external input at COM+ required)
	Output current:	max. 20 mA (at 24 V)
	Internal resistance:	R _i ≈ 600 Ohm
	Protection circuit:	*) short circuit proof up to max. 27 V
	Connections:	COM+: screw terminals, 1.5 mm ² / AWG 16 outputs: 25-pin SUB-D connector (female)
Serial interface:	Format:	RS232 or RS485 (selectable)
	Baud rate (selectable):	600, 1200, 2400, 4800, 9600 (default), 19200, 38400 Baud
	Operation modes:	PC or printer mode
	Connections:	9-pin SUB-D connector (female)
Housing:	Material:	plastic
	Mounting:	35 mm top hat rail (according to EN 60715)
	Dimensions (w x h x d):	40 x 79 x 91 mm / 1.5748 x 3.1102 x 3.5827 inch
	Protection class:	IP20
	Weight:	approx. 190 g
Ambient temperature:	Operation:	0 °C ... +45 °C / +32 ... +113 °F (not condensing)
	Storage:	-25 °C ... +70 °C / -13 ... +158 °F (not condensing)
Failure rate:	MTBF in years:	65.6 a (long-term usage at 60 °C / 140 °F)
Conformity & standards:	EMC 2004/108/EC:	EN 61000-6-2, EN 61000-6-3, EN 61000-6-4
	Guideline 2011/65/EU:	RoHS-conform