



DM221 / DM222

Strain Gauge Amplifier and Converter for full bridge sensors

Product Features:

- 6-wire connection for two independent strain gauge full bridge sensors (DM222)
6-wire connection for one strain gauge full bridge sensor (DM221)
- Two independent analog outputs (DM222)
One analog output (DM221)
- Functions for scaling and linking the sensor signals (e. g. A+B, A-B, ...)
- Adjustable bridge voltage per sensor from 3 VDC to 10 VDC
- Sensitivity of the sensor inputs 1 ... 10 mV
- Transmission of the sensor data via RS485
- Programming via USB and the user interface OS (freeware)
- 4 control inputs HTL/PNP
- 4 control outputs for signaling different operation states
- Power supply 18 ... 30 VDC

Technical Specifications:		
Connections:	Connector type:	screw terminal, 1,5 mm ² / AWG 16
Power supply:	Input voltage:	18 ... 30 VDC
	Protection circuit:	reverse polarity protection
	Ripple:	≤ 10 %
	Consumption:	approx. 50 mA (unloaded)
Sensor interface:	Connection:	6-wire
	Configuration:	full bridge
	Bridge voltage:	3 to 10 VDC
	Sampling rate:	min. 5 ms
	Resolution:	16 Bit
	Load:	350 Ohm ... 1 kOhm
Analog output:	Configuration:	current or voltage operation
	Voltage output:	-10 ... +10 V (max. 2 mA)
	Current output:	0/4 ... 20 mA (burden max. 270 Ohm)
	Resolution:	16 Bit
	Accuracy:	± 0,1 % 0°C ... +60°C
	Reaction time:	5 ms
Control input:	Number of inputs:	4
	Characteristics:	HTL, PNP
	Frequency:	max. 100 Hz
	Reaction time:	10 ms
	Load:	max. 5 mA at 24 VDC
Control output:	Number of outputs:	4
	Format / level:	HTL: 16 ... 29 V (depends on the power supply)
	Output current:	max. 30 mA
Housing:	Material:	plastic housing
	Mounting:	35 mm DIN rail (EN 60715)
	Dimensions (w x h x d):	34 x 100 x 131 mm (without plugs) 34 x 118 x 140 mm (with plugs)
	Protection class:	IP20
	Weight:	approx. 160 g
Temperature range:	Operation:	0 °C ... +60 °C (not condensing)
	Storage:	-25 °C ... +70 °C (not condensing)
Failure rate:	MTBF in years:	XXX (Continuous operation at 60 °C)
Conformity and standards:	EMV 2014/30/EU:	EN 61326-1: 2013 for industrial location EN 55011: 2016 + A1: 2017 + A11: 2020 Class A
	RoHS (II) 2011/65/EU	
	RoHS (III) 2015/863:	EN IEC 63000: 2018