RMP422Si

REMOTE MULTIPURPOSE ANALOG INPUT SAFETY W/HART

RMP422Si is an RBUS IO module with 32 HART enabled analog input field channels for use in safety applications. The input channels are individually software configurable for the appropriate signal type and parameters. The module has extended loop monitoring including current leak detection on each channel. The module is certified for use in hazardous area zone 2.

MODULE FEATURES

Approved for safety applications:

- SIL2 in single configuration
- SIL3 in redundant 1oo2 configuration
- Online software configurable
- Transparent HART communication
- HART variables for use in control application
- Suited for use is hazardous area zone 2
- Spare part for RMP422S
- Over-voltage protection
- Extensive module diagnostic
- Easy installation and replacement
- Simple and safe FW upgrade
- Status LED

I/O CHANNELS

- 32 analog input field channels
- Current leak detection
- Extended loop monitoring
- Internally or externally powered
- Short-circuit proof
- Configurable soft fail-safe on outputs

SIGNAL TYPES

Analog input HART (2/3/4 wire, 4-20mA, 0-10V)
HART variables (max. 16 variables, 1-8 channels)

TECHNICAL SPECIFICATIONS

KM Part no.
RMP422Si 408406

Electrical

Supply voltage:	24 VDC (18-31.2V)
Consumption:	10 W Typical
Max total load:	16A
RBUS connectors:	2x9-pin male D-Sub
Power and IO connectors:	Screw terminals, max. 2.5 mm²

Analog input volt (NOT FOR SIL APPLICATIONS)

Internally or externally powered:	0 - 10V
Accuracy:	±0.1% of full scale

Analog input current

Internally or externally powered:	0 - 24mA
Input resistor:	300 Ω
3-wire option, internally powered:	1 A
Overcurrent protection:	(30 mA/1 A)
Measurement accuracy:	±0.15% of full scale
Safety accuracy:	< +/- 1% of full scale

RBUS interface

Dual 9 pin male D-Sub, RS485, galvanic isolated

Compliance

IACS E10
DnV GL 2.4
IEC 60945
RoHS Directive 2011/65/EU
EMC Directive 2014/30/EU
ATEX Directive 2014/34EU (II 3G Ex ec IIC T4 Gc)

Approvals

Presafe 18ATEX 12094X

Environmental

Ambient temperature (operation):	-15°C to 70°C
Temperature (storage):	-25°C to 70°C
Humidity (operation):	max. 95% RH, non condensing
Humidity (storage):	max. 95% RH, non condensing

IP20 (IEC 60529)

Mechanical

Width:	158 mm
Depth:	87 mm
Weight:	1.35 kg

DIN Rail vertical mounted (35 7.5/15)

Failure rate

MTBF (SN29500/40°C):	17 years

Specifications subject to change without any further notice.