PROSAFE-RS FIO

Product Data Sheet

SAI143-H63/PRP S4

HART analog input module

INPUT CHANNELS	RATED INPUT	PERMISSIBLE INPUT	ACCURACY, 0.05-23 MA
16	**4 to 20 mA**	**0 to 25 mA**	**±16 µA**

Yokogawa SAI143-H63/PRP S4 is a sixteen-channel 4-20 mA analog input module for ProSafe-RS FIO. The H variant supports HART and PRM functions, while the -63 construction uses a signal-cable interface adapter without explosion protection. The /PRP option adds a false-insertion prevention pin.

01 TECHNICAL DATA

Input channels	16
Rated input	4 to 20 mA
Permissible input	0 to 25 mA
Accuracy, 0.05-23 mA	±16 µA
Accuracy below 0.05 mA	±32 µA
Data update period	40 ms
Temperature drift	±16 µA per 10 °C
Power-off input impedance	500 kΩ minimum
Input protection voltage drop	0.45 V maximum
Transmitter voltage at 20 mA	16.15 V minimum

02 ADDITIONAL PRODUCT DATA

Transmitter current limit	25 mA
5 V bus current	320 mA maximum
24 V bus current	550 mA maximum
Transmitter reset software	R4.03.00 or later, style S4 or later
Corrosive environment class	ISA G3

03 PRODUCT FUNCTION

The module updates input data every 40 ms and provides an accuracy of ±16 µA from 0.05 to 23 mA. Two-wire or four-wire selection is made per channel using setting pins. With style S4 and ProSafe-RS R4.03.00 or later, transmitter power can be switched off and on for all sixteen two-wire channels together.

04 SYSTEM COMPATIBILITY

Set each channel for two-wire or four-wire operation with the specified pins. Allow for the module input-protection voltage drop when checking transmitter compliance, and use an isolation barrier rather than a Zener barrier where an intrinsically safe field arrangement is required.

05 DOCUMENT BASIS

Yokogawa manufacturer documentation. Selected source pages: 1, 6, 7, 9.

AMIKON PRODUCT SUPPORT

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