

# HART Termination Board

## HiSHPTB/32/YOK-AIO-R-02



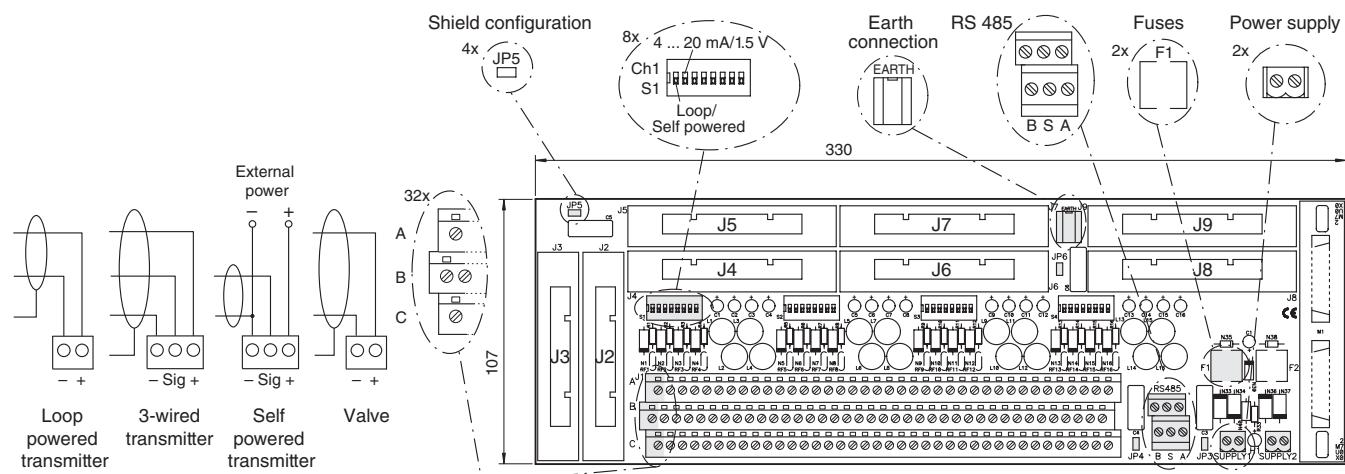
- Yokogawa Centum 3000 CS AAI835 replacement FTA
- 32 channels of I/O
- 16 channels AI and 16 channels AO
- 2- or 3-wire or self powered transmitters or valves
- Short-circuit protected
- Plug-n-play wiring capabilities



### Function

The Termination Board designed for easy HiDMux2700 Multiplexer integration with the Yokogawa Centum 3000 CS system. With the Multiplexer integrated into the board and plug-n-play option for the DCS equipment, this provides a very clean access to the HART signals, while reducing the need for marshalling cabinets and reducing equipment that require extra cabinet space. The HART Termination Board provides a robust solution for on-line HART communications, interfaces up to 32 field located HART devices, and, it allows the user to replace standard DCS field termination panels.

### Connection



### Technical Data

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#### Supply

Rated voltage	$U_r$	20 ... 30 V DC
Fusing		3.15 A, 5 x 20 mm (0.2 x 0.8 inch)
Power dissipation		0.7 W, with Multiplexer
Reverse polarity protection		no

#### HART signal channels (intrinsically safe)

HART signal channels	
Number of channels	32 unbalanced signal loops

#### Redundancy

Supply	no
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#### Galvanic isolation

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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## Technical Data

HART signal channels	30 V DC
<b>Ambient conditions</b>	
Ambient temperature	0 ... 55 °C (32 ... 131 °F)
Relative humidity	5 ... 90 %, non-condensing
<b>Mechanical specifications</b>	
Core cross section	2.5 mm <sup>2</sup> (16 AWG)
Connection	field side: screw terminals control side: KS connector (proprietary) RS 485 interface: removable screw terminals power: removable screw terminals
Mass	approx. 500 g
Dimensions	330 x 107 x 208 mm (12.9 x 4.2 x 8.2 inch) (W x H x D) , depth including module assembly with HiDMux2700
Mounting	DIN rail mounting
<b>General information</b>	
Supplementary information	Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> .

## Additional Information

### Connection Assignment

Connector	Channel
J1	1 ... 32
J2	1 ... 8, primary
J3	1 ... 8, secondary
J4	9 ... 16, primary
J5	9 ... 16, secondary
J6	17 ... 24, primary
J7	17 ... 24, secondary
J8	25 ... 32, primary
J9	25 ... 32, secondary

### Configuration

		Switch	Field and DCS have the same signal (4 ... 20 mA or 1 ... 5 V)	Converts a 4 ... 20 mA signal from the field into the 1 ... 5 V signal for DCS	Switch	Self powered device	Loop powered device
S1	Channel 1	1	Off	On	2	Off	On
	Channel 2	3	Off	On	4	Off	On
	Channel 3	5	Off	On	6	Off	On
	Channel 4	7	Off	On	8	Off	On
S2	Channel 5	1	Off	On	2	Off	On
	Channel 6	3	Off	On	4	Off	On
	Channel 7	5	Off	On	6	Off	On
	Channel 8	7	Off	On	8	Off	On
S3	Channel 9	1	Off	On	2	Off	On
	Channel 10	3	Off	On	4	Off	On
	Channel 11	5	Off	On	6	Off	On
	Channel 12	7	Off	On	8	Off	On
S4	Channel 13	1	Off	On	2	Off	On
	Channel 14	3	Off	On	4	Off	On
	Channel 15	5	Off	On	6	Off	On
	Channel 16	7	Off	On	8	Off	On
S5	Channel 17	1	Off	On	2	Off	On
	Channel 18	3	Off	On	4	Off	On
	Channel 19	5	Off	On	6	Off	On
	Channel 20	7	Off	On	8	Off	On
S6	Channel 21	1	Off	On	2	Off	On
	Channel 22	3	Off	On	4	Off	On
	Channel 23	5	Off	On	6	Off	On
	Channel 24	7	Off	On	8	Off	On

## Additional Information

		Switch	Field and DCS have the same signal (4 ... 20 mA or 1 ... 5 V)	Converts a 4 ... 20 mA signal from the field into the 1 ... 5 V signal for DCS	Switch	Self powered device	Loop powered device
S7	Channel 25	1	Off	On	2	Off	On
	Channel 26	3	Off	On	4	Off	On
	Channel 27	5	Off	On	6	Off	On
	Channel 28	7	Off	On	8	Off	On
S8	Channel 29	1	Off	On	2	Off	On
	Channel 30	3	Off	On	4	Off	On
	Channel 31	5	Off	On	6	Off	On
	Channel 32	7	Off	On	8	Off	On

Jumper	Analog input	Galvanic grounding	Capacitive grounding
JP3	RS-485	closed	opened
JP4	Field side channels 1 ... 32	closed	opened
JP5	DCS side channels 1 ... 16	closed	opened
JP6	DCS side channels 17 ... 32	closed	opened

### Interface

Yokogawa I/O interface

- AAi835