

HIU-4 HUB INTERFACE UNIT

0 030 110 019 000

PRODUCT DESCRIPTION

The HIU-4 is a small sensor interface unit. The unit provides supplies and inputs for up to 10 sensors, the outputs of which are sampled, and data/diagnostic information is transmitted to the host ECU via CAN or CAN-FD.

ELECTRICAL INPUTS

- Unit supply voltage 8-16V
- Unit supply Current: <200mA Max.
- Supply reverse and transient voltage protection
- 2 x 8-16V supply outputs each with short circuit protection (50mA Max. over full temperature range)
- 5 x Analogue, 12-bit, 0-5V or Pt1000 (configurable)
- 2 x LVDT sensor interfaces (12-bit)
- 2 x K-Type Thermocouple
- 1 x DHE Wheel Speed
- 1 x CAN FD & CAN compatible interface
- 1 x Time Synchronous Trigger input
- Internal diagnostics (supply voltage and internal temperature)

ELECTROMAGNETIC COMPATIBILITY

- Complies with the essential protection requirements of 2014/30/EU
- MECHANICAL
- Unit size approx.: 64.3 x 20.0 x 30.95 mm
- Weight: <50g
- Aluminium 6082-T6 body, hard anodised and dyed black



ENVIRONMENTAL

- Vibration 24 hours in 3 axes, Profile:

Frequency (Hz)	Amplitude (g2/Hz)
100	0.00797
200	0.171757
300	0.54279
650	0.00965
1000	0.0208

- Shock test: 50g, ½ sine, 11ms duration, 10 times per axis
- Ingress protection: IP66
- Operating temperature: 0°C to 125°C
- Storage temperature: -10°C to 125°C
- Resistant to standard motorsport fluids

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CONNECTION DEFINITION

- Connector 1 - 8STA-0205-SB – **BLUE**

Pin	Description
1	LVDT 2 Primary +
2	LVDT 2 Primary -
3	LVDT 2 Secondary +
4	LVDT 2 Secondary -
5	LVDT 2 Secondary Centre Tap

- Connector 2 - 8STA-0205-SC – **ORANGE**

Pin	Description
1	LVDT 1 Primary +
2	LVDT 1 Primary -
3	LVDT 1 Secondary +
4	LVDT 1 Secondary -
5	LVDT 1 Secondary Centre Tap

- Connector 3 - 8STA-0205-PN – **RED**

Pin	Description
1	CAN High
2	CAN Low
3	Unit Supply 12V
4	Supply Ground
5	Time Synchronous Trigger

- Connector 4 - 8STA-0205-SA – **YELLOW**

Pin	Description
1	DHE Wheel Speed
2	Analogue/Pt1000
3	Supply Output 12V
4	Supply Ground
5	Analogue/Pt1000

- Connector 5 - 8STA-0205-SE – **GREY**

Pin	Description
1	Single-axis Accelerometer/Pt1000
2	Analogue/Pt1000
3	Supply Output 12V
4	Supply Ground
5	Analogue/Pt1000

- Connector 6 - 8STA-0205-SD – **GREEN**

Pin	Description
1	K-Type Thermocouple 1 +
2	K-Type Thermocouple 1 -
3	K-Type Thermocouple 2 +
4	K-Type Thermocouple 2 -
5	RESERVED

PRODUCT SUMMARY | SCR XXXX | REV YY | LAST UPDATE: DD/MM/YY

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