PRODUCT SUMMARY

McLaren ELECTRONIC SYSTEMS

SENSOR NODE

SN-32

The SN-32 is an intelligent, microprocessor controlled, data acquisition unit. A range of analogue, speed and thermocouple measurements are sampled at rates of up to 1kHz. The results are transmitted back to the host unit via CAN or HDLC link for logging or control.

SN-32 is configured by System Monitor.

Electrical

- Supply Voltage 7.9 to 16.0V DC
- Supply Voltage not to exceed 17V continuous (the unit is protected against transients and reverse polarity)
- Supply Current 100mA typical @ 12V
- Data Acquisition processor 80C164
  - 20MHZ
  - On-chip CAN 2.0B controller
  - 2M HDLC sensor bus link
  - 64kbyte Flash ROM
  - 64kbyte SRAM

Application

- Chassis monitoring

Service

- Recommended service interval 12 months (internal battery is replaced)

Electro Magnetic Compatibility

- Complies with the essential protection requirements of 89/336/EEC

Connection Definition

- Integral, sealed, LEMO series F motorsport connectors

Connector A	22 way	HEN3F322XLNP
Connector B	22 way	HEP3F322XLNP
Connection IN	8 way	HES1F308XLNP
Connection OUT	8 way	HEN1F308XLN

- For pin numbers please request Product Specification EDD 99-04

Mechanical

- Case material Magnesium alloy, chromate converted and painted with black epoxy
- Weight less than 150g

Environmental

- Splash resistant to standard motorsport fluids
- Lids and screws sealed with silicone rubber
- Maximum humidity 100%
- Minimum operating temperature 0°C
- Internal Temperature not to exceed 850°C as measured by internal diagnostic sensors
- Storage Temperature -10°C to 85°C
- Vibration 100 to 1000Hz, all axes, 24 hours

07/04/09

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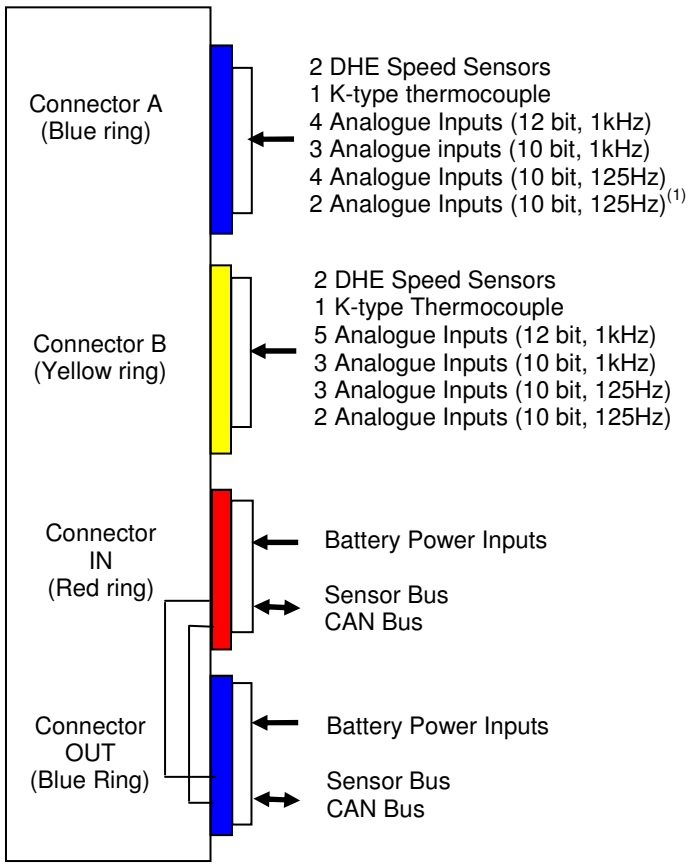

(1) can be configured for Pt1000

Sensor Inputs

- 4 DHE Speed Sensors
- 9 Analogue (0 to 5V, 12bit, 1kHz)
- 6 Analogue (0 to 5V, 10 bit, 1kHz)
- 7 Analogue (0 to 5V, 10 bit, 125Hz)
- 4 Analogue (0 to 5V, 10 bit, 125Hz can be configured for PT1000 temperature sensors)
- 2 K type thermocouples (uses pairs of input connections)

Communications

- 1 HDLC Sensor bus (2Mbps)
- 1 CAN 2.0B bus (up to 1Mbps)

Diagnostics

- Sensor readings are checked for out of range and open circuit
- The following internal parameters are monitored:
  - Board temperatures
  - Unit supply voltages
  - External 5V supply voltages and currents

For more details, please request our Product Specification EDD 99-04.

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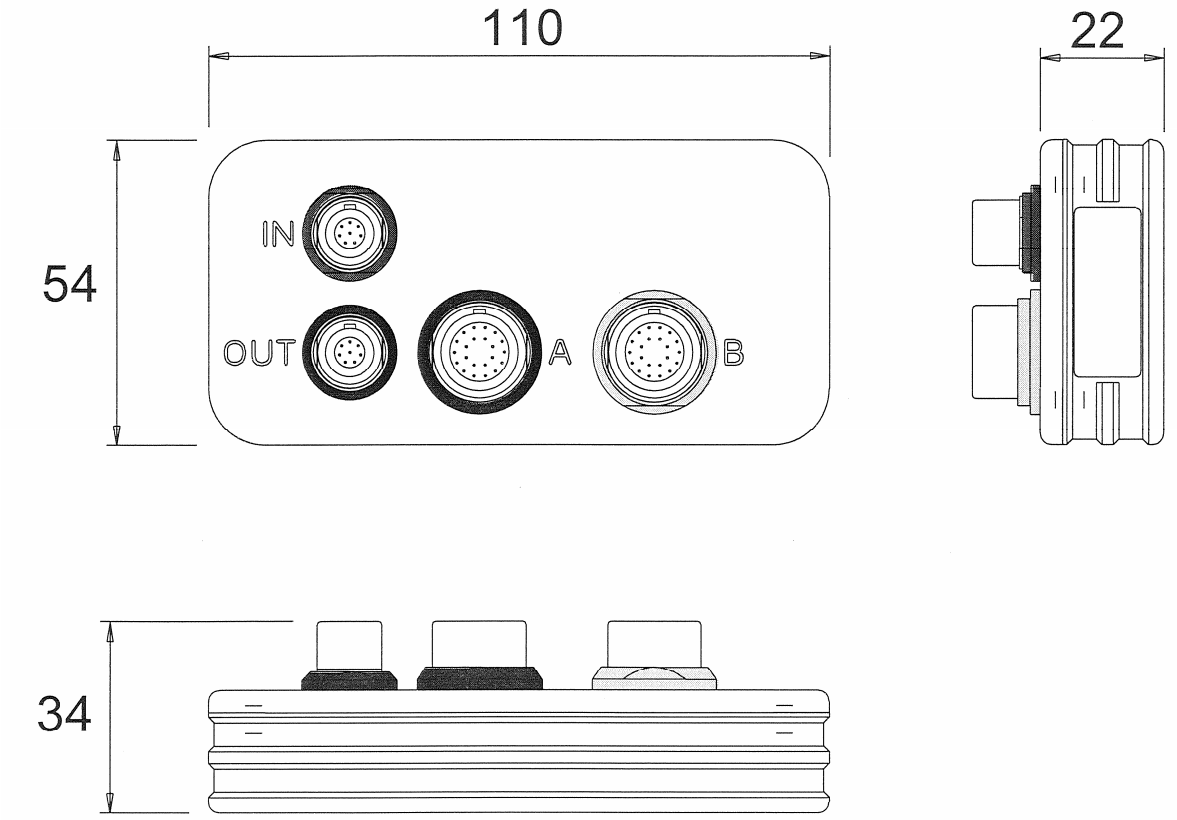

Description	Order Code
SN-32	O 030 095 006 000

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