

DATASHEET

CIJECT IMPS READOUT UNIT



KEY FEATURES

- Engineered to provide sensor power and display pressure readings in bar.
- Designed to be compatible for use with RTM, VRTM and Resin Infusion processes.
- Continuously monitors pressure conditions inside the mould, providing accurate and reliable real time pressure data.
- Integrated sensor power supply which simplifies setup and operation and ensures consistent sensor performance.
- Data logging output option enables seamless integration with the CIDAQ data acquisition system, ensuring traceability and supporting process optimisation.
- Configurable relay alarm output.
- Digital LED display provides clear, real-time pressure readings, enabling quick visual monitoring and ensuring precise in-mould process control.
- Suitable for harsh manufacturing environments due to the compact and robust design.

PRODUCT VERSIONS

Standard Options	Description	Product Number
Standard: 4 Channel	In-mould pressure sensor (IMPS) readout unit designed for monitoring of up to 4 x 0 — 10V output sensors.	XE-0053

ANCILLARIES/RELATED PRODUCTS

Related Products	Description	Product Number
Pressure Sensor 0 to 4 Bar (Absolute) — MIL-Spec 6 Pin Connector	In-mould pressure sensor suitable for VRTM and Direct Infusion processes, providing in-mould feedback control to a CIJECT machine. Output: 0 — 10V	XE-0050-008
Pressure Sensor: 0 to 10 Bar (Absolute) — Hex Body with M12 Connector	In-mould pressure sensor suitable for RTM process, providing in-mould feedback control to a CIJECT machine. Output: 0 — 10V	XE-0050-011
IMPS Lead Assembly: 3 m M12 Connection	Connects Readout Unit to Sensor (M12 socket to 3 pin IMPS plug).	XE-0060-08
IMPS Lead Assembly: 5 m M12 Connection	Connects Readout Unit to Sensor (M12 socket to 3 pin IMPS plug).	XE-0060
IMPS Lead Assembly: 10 m M12 Connection	Connects Readout Unit to Sensor (M12 socket to 3 pin IMPS plug).	XE-0060-01
IMPS Lead Assembly: 3 m MIL-Spec Connection	Connects Readout Unit to Sensor (3 pin IMPS plug to 6 pin MIL spec socket).	XE-0060-05
IMPS Lead Assembly: 10 m MIL-Spec Connection	Connects Readout Unit to Sensor (3 pin IMPS plug to 6 pin MIL spec socket).	XE-0060-06
IMPS Lead Assembly: 25 m MIL-Spec Connection	Connects Readout Unit to Sensor (3 pin IMPS plug to 6 pin MIL spec socket).	XE-0060-07

TECHNICAL SPECIFICATION

General	
Product Dimensions (L x W x H)	220 mm x 191 mm x 66 mm
Product Weight	1.55 kg
Nominal Service	1 calendar year
Design Life	10 years

Enclosure & Sensor Connections	
Controller	Omron E5CC
IMPS Connections	4 x 0 — 10V inputs
IMPS Output	Straight male M12 4 way
Relay Output	Plug 5.08 2 way

TECHNICAL SPECIFICATION (continued)

Power Requirements	
Operating Voltage	110 — 230V AC
Maximum Operating Current	1A
Required Supply Fusing	3.15A 20 mm cartridges
Mains Frequency	50/60 Hz
Short-Circuit Current	1.5 kA
Relay Output	3A

Operating Conditions	
Operating Temperature	0 — 45°C
Storage Temperature	0 — 60°C
Humidity	20 — 75% non-condensing
Noise Output	< 70 dB