

Intrinsically Safe CAN Bus Isolation Unit

Model: CBI-100

Features

- ✓ Isolation of CAN Data from hazardous environments
- ✓ Intrinsically Safe Power source
- ✓ DIN Enclosure with screw terminal connections
- ✓ Diagnostic LED indicators
- ✓ Compact design



The CBI-100, is an Intrinsically Safe power supply and CANBus isolator. The unit currently carries MSHA and IEC 60079-11 Intrinsic Safety evaluations allowing use in applications specific to machines operating in coal and methane environments. The power supply portion can be connected to 12V DC from the non-I.S. or XP environment and produces a 12V DC, 0.9A I.S. power source. The CAN isolation provides isolation of bi-directional CANbus data between the I.S. and non-I.S. environments. Currently specified for use with Cervis GWM sensor/data acquisition modules, but can also be a “gateway” between non-I.S. CAN systems and/or other I.S. devices pending independent system approval.

Specifications

Power

V_{in} +12VDC (10.5V-32V)
10.5VDC min required

Operating Power 12Watts

Enclosure

Dimensions mm: 45x75x109.5

Weight 24kg

Durability UL94V-0 rated ABS plastic

Environment

Operating Temp -20°C to 55°C

Storage Temp -40°C to 85°C
(-40°F to 185°F)

Humidity 0 to 90% non-condensing

Ingress IP40

Screw Terminals

Size M3

Screwdriver Flat or Phillips

LEDs

I.S. 12VDC	Green	– Active Output
Input Pwr	Green	– OK (10.5-32vdc)
CAN I.S.	Red	– CAN data flow I.S. to Host
CAN Host	Red	– CAN data flow Host to I.S.

CAN Data

250 kb/sec
Factory configurable for higher data rates