

RS-232 ↔ 20mA Current Loop Converter



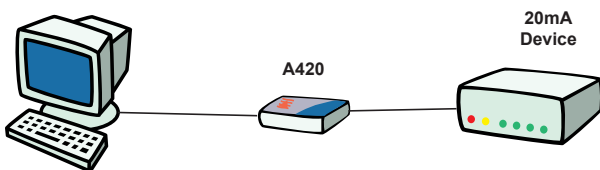
Provides Optical Isolation and Transient Protection



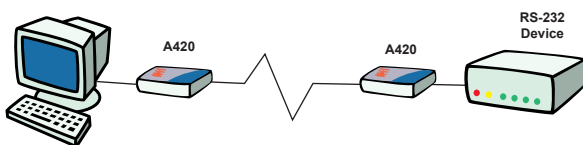
A420

Applications

- Connect a 20mA Current Loop device to a PC using the A420 interface converter.



- Use two A420s to connect RS-232 devices separated by up to 1km. Connecting via 20mA Current Loop takes advantage of its noise immunity properties.



- Where isolation is a requirement, particularly in a harsh industrial environment, the A420 can withstand 2500Vac for up to one minute.
- The 20mA Current Loop breaks the ground loop at each end so the A420 is suitable for inter-building communications where different ground potentials can make RS-232 unreliable.

Features

- Optically isolated data lines and high speed data transfers, e.g. 19,200bps over 400 metres and a maximum data rate of 64Kbps
- Uses Hewlett Packard Opto-couplers for 20mA
- Available as a pre-set, fully isolated pair (2500Vac for 1 minute)
- Full Duplex point-to-point communication using only 4 wires (one pair each for receive and transmit data)
- Screw terminal connector on 20mA side
- Current Loop Transmit and Receive lines are switch selectable for ACTIVE and PASSIVE
- Switchable DCE/DTE selection for RS-232 port
- LED indicators for data activity
- Can be used in multidrop environments
- Very LOW COST - Very BIG FEATURES

Specifications - A420

- RS-232 Port: Asynchronous RS-232
DB-25 female connector
Switch Selectable DCE/DTE
Transfer up to 64Kbps
- 20mA Port: 20mA Current Loop
Screw Terminal Block (2.5mm dia.)
Optically coupled 20mA Transmitter
Optically coupled 20mA Receiver
RD and TD loops may each be configured as either ACTIVE or PASSIVE
Optically isolated 20mA signal
Isolation in PASSIVE mode only
- Protection: Transient Voltage Suppression Diodes
RS-232 - Transmit Data Line
- Receive Data Line
- all unused handshake lines are tied to a common voltage rail.
20mA - Transmit Data pair
- Receive Data pair
- LED Indicators: Receive Data RS-232
Receive Data 20mA Current Loop
Power On
- Power Supply: 9V (200mA) DC
Reverse Polarity Protection
- Dimensions: 84mm x 58mm x 23mm
Weight: 160 grams

All Specifications subject to change without notice



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