

# Integrity Instruments

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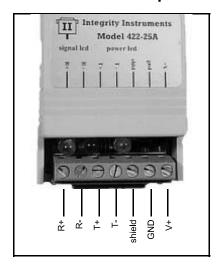
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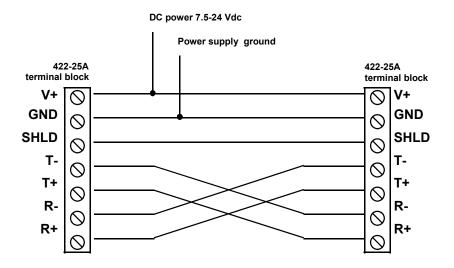
422-25A High Speed

RS-232 to RS-422 Converter

### 422-25A Connector pin out



## 422-25A full-duplex cable diagram



#### **Performance Characteristics**

DC input voltage min. (+V)	7.5 Vdc
DC input voltage maximum. (+V)	24 Vdc
DC input current nominal (+V)	40 ma
DC input current max. (+V)	250 ma
ESD static discharge (A/B)	1500 V
Baud Rate maximum	115.2 Kbps
Baud Rate minimum	110 bps
Number of RS-422 nodes	2
Maximum cable length	4000 feet +
Termination resistance (built in)	120 ohms

#### Notes:

- 1) The **GND** and **shield** signals are connected and therefore electrically equivalent.
- 2) We suggest a 9Vdc 400ma power supply.

#### **LED Operation:**

The 422-25A has two signal LED's for data transmit and receive and one power indication LED. Since the signal LED's are powered only when data is present, it may be illuminated for somewhat brief periods.

RED LED ON Transmitting data
GREEN LED ON Receiving data
YELLOW LED ON Power On

**<u>MOTE:</u>** When power only is supplied to the unit, the green LED may be on as the RX input lines are floating.

#### **General Operational Notes:**

- 1) There are **NO** special RS-232 settings required for operation
- 2) TxD is connected to DB25 pin 2
- 3) RxD is connected to DB25 pin 3
- 4) GND is connected to DB25 pin 7
- 5) 120 Ohm bus termination is integrated into the unit
- 6) V+ reverse polarity is diode protected
- 7) A power source is required for proper operation

#### DTE vs. DCE:

The **422-25A** expects the transmitted data to be present on pin 2 of the DB25 connector. Conversely, the received data is output on pin 3 of the DB25 connector. If the inverse is required, use a NULL MODEM cable, or switch the TxD and RxD signals.

RS-232 TxD transmitted data: DB25 pin 2 RS-232 RxD received data: DB25 pin 3

<b>RS-422</b>	Wire
K3-422	wire

Belden Cable Number	Number of pairs	DC Resistance ohms	Impedance ohms	Capaci- tance Pf per foot	Wire gauge	O.D. shield
9729	2	24 ohms/ 1000 ft	100	12.5	20(7x28)	.243" yes
8162	2	24 ohms/ 1000 ft	100	12.5	24(7x32)	.343" yes
9730	3	24 ohms/ 1000 ft	100	12.5	24(7x32)	.343" yes

#### WARRANTY

**Integrity Instruments** warranties **all** products against defective workmanship and components for the life of the unit. Integrity Instruments agrees to repair or replace, at it's sole discretion, a defective product if returned to Integrity Instruments with proof of purchase. Products that have been mis-used, improperly applied, or subject to adverse operating conditions fall beyond the realm of defective workmanship and are not convered by this warranty.