

IT501 Communication Module RS-232 Serial Interface

FEATURES:

- Digital serial communication using RS232
- 9600 Baud communication rate
- Connects one iT100-series vibration transmitter module to computer
- Daisy-chain of single RS232 type serial connection
- Built-in temperature sensor
- Communication indicators

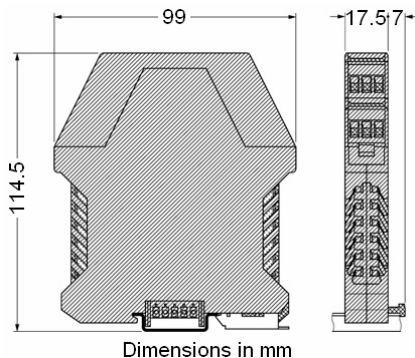
BENEFITS:

- Remote data availability for monitoring
- No need for RS485 interface for multiple module connections
- Use a standard computer serial port
- Communication indicator lights provide visual status of properly connected modules and active communication

The IT501 Communication Module allows the user the ability to digitally communicate with the IT100/200/300 series of vibration transmitter modules. The communication uses a standard RS232 serial communication protocol. Computers or other digital devices can interface to the IT-series of vibration transmitters to request data using a typical RS232 serial port.

Multiple IT501 modules can be daisy-chained such that a single RS232 serial port can be used to communicate with multiple IT501's.

Each IT501 interfaces to a single IT-series vibration transmitter module. Multiple transmitter modules cannot be connected to a single IT501. However, multiple IT501 units can be daisy-chained. The communication baud rate is 9600 baud. This will allow communication using the RS232 serial interface over 300 feet of cable.



COMPUTER CONNECTION (PC)

Communication Type	RS232 Serial, Asynchronous ¹
Baud Rate	9600
Byte Format:	
Bits/Byte	8
Stop Bits	1
Parity	None

REPEATER CONNECTION (IT)

Communication Type	RS232 Serial, Asynchronous ¹
Baud Rate	9600
Byte Format:	
Bits/Byte	8
Stop Bits	1
Parity	None
iT501 in daisy-chain.....	8, maximum

ELECTRICAL

Power Requirements:	
Voltage	12 VDC min, 30 VDC max
Current.....	25 mA, typical
Turn on time.....	3 seconds
Connectors	4, on front
TBUS	5-pin, on rear of module ²

ENVIRONMENTAL

Temperature	-40 to 85°C
Humidity.....	95%, non-condensing

PHYSICAL

Case	35 mm DIN rail mounting
Wide (DIN rail width)	17.5 mm
Front Panel Communication LED Indicators	TBUS, PC, IT

CONNECTION	FUNCTION
TX	Transmit Data
RX	Receive Data
COM	Communication Common

ACCESSORIES SUPPLIED: (1) IT031 17.5 mm TBUS Connector
(2) IT041 3-Position Cable Connector Plug
(2) IT043 3-Position Blank Cover

ACCESSORIES AVAILABLE: RIT041-IT041-J9F-xx³, iT501-to-iT501 Interconnect Cable
RIT041-DB9-J9F-xx³, iT501-to-PC DB9F Cable

- NOTES: ¹ Asynchronous serial communications connect the TX (transmit) of one device to the RX (receive) of the other device and the Common connects directly.
² The TBUS interfaces the iT501 to the iT-series Vibration Transmitter modules. It is the only method to connect the iT501 to a transmitter.
³ The "xx" at the end of the cable part number signifies the cable length in feet.

Module Wiring

The diagram shown in figure 1 illustrates the wiring for multiple iT501 modules. Each iT501 operates using data from a companion iT-series vibration module.

Users can provide their own cables for the interconnection or use cables from Wilcoxon.

Each iT501 module is supplied with the IT041 connectors for the serial port input and output connections. An IT032 TBUS connector is also included with the iT501.

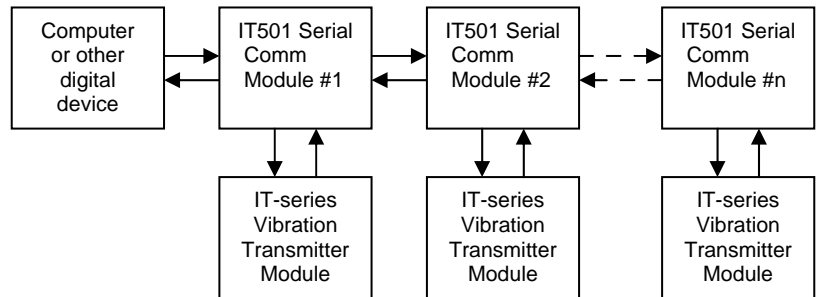


Figure 1 - Block Diagram of module interconnection

Cable Model	Function
RIT041-IT041-J9F-x	iT501-to-iT501 Communication
RIT041-DB9-J9F-x	iT501-to-PC Communication

Table 1 - Cables available for use with iT501 ("x" is cable length in feet)

The optional cables described in Table 1 will be supplied with their own IT041 connector plugs already wired for use.

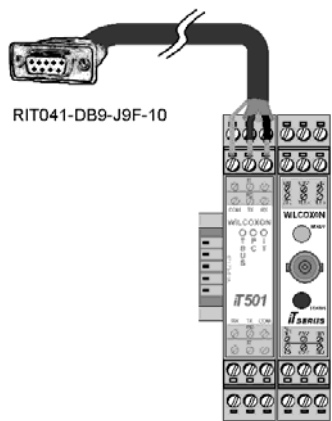


Figure 2 - Computer-to-iT501 Wiring

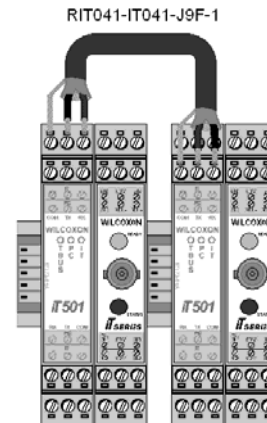


Figure 3 - Cable Connections for iT501-to-iT501 Wiring