Integrity Instruments

232-OPT1 & 232OPT1L
High Speed
RS-232 to RS-232
Opto Isolated Converter
and Repeater

INTRODUCTION

The Integrity Instruments 232-OPT1 converter was designed to completely isolate a RS-232 port when communicating with another RS-232 port device. This isolation not only separates the TX and RX data lines, but the **RTS and CTS control lines as well!** The unit has LED's to show the status of power and the states of the various control and data lines. By nature the 232-OPT1 can also be used as a 232 repeater to extend the range of a 232 connection point. The converter is available in two models, the 232-OPT1 (0° to 70°C) and the 232-OPT1L (-40° to 85°C).

The 232 OPT1 requires only one power source for operation, and has an in built dc to dc converter to power both sides of the isolation barrier.
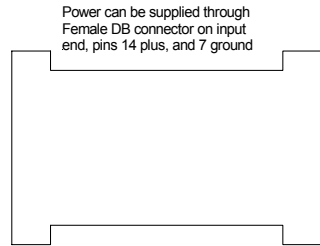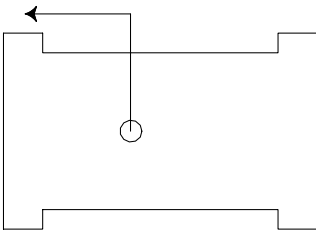
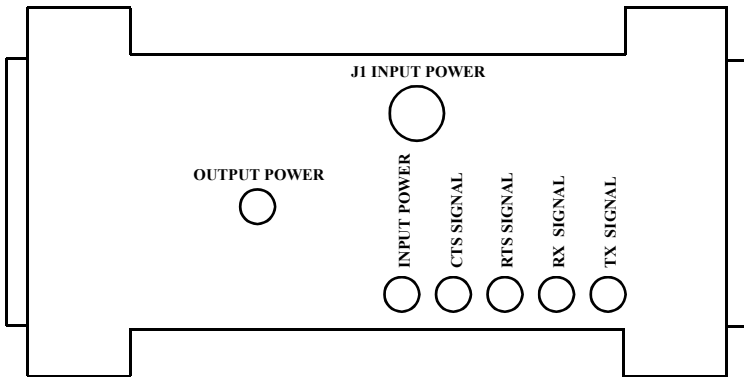| Pin outs	
Input (P1) 25 pin **female** db connector	Output (P2) 25 pin **male** db connector
Pin 2 Transmit data TX	Pin 2 Transmit data TX
Pin 3 Receive data RX	Pin 3 Receive data RX
Pin 4 Ready To Send RTS	Pin 4 Ready To Send RTS
Pin 5 Clear To Send CTS	Pin 5 Clear To Send CTS
Pin 7 Ground GND	Pin 7 Ground GND
Pin 14 +9VDC Ext Input	

Performance Characteristics

PARAMETER	OPT1
Power sources required	One
DC Input voltage min (+V)	7.5 Vdc
DC Input voltage max (+V)	12 Vdc
DC input current nominal	110 ma
Isolation voltage input end to output end	3kv
Baud rate maximum	115.2 Kbps
Baud rate minimum	0 bps

POWER WIRING FOR OPT1

Power may be supplied through the 2.5 mm receptacle on the unit, or may supplied through pin 14 (+ voltage) and pin 7 (ground) of input (P1) 25 pin female db connector.

Power can be supplied through Female DB connector on input end, pins 14 plus, and 7 ground

J1 INPUT POWER

OUTPUT POWER

INPUT POWER

CTS SIGNAL

RTS SIGNAL

RX SIGNAL

TX SIGNAL

POWER	232-OPT1 JACK 1, OR PIN 14 ONLY POWERS BOTH IN AND OUT **YELLOW** LED FOR INPUT, **GREEN** LED FOR OUTPUT
TX D3	IF THE INDICATOR IS BLANK THERE IS NO DATA PRESENT IF THE INDICATOR IS RED THERE IS MARK DATA PRESENT
	IF THE INDICATOR IS GREEN SPACE DATA IS PRESENT
RX D4	IF THE INDICATOR IS BLANK THERE IS NO DATA PRESENT IF THE INDICATOR IS RED THERE IS MARK DATA PRESENT
	IF THE INDICATOR IS GREEN SPACE DATA IS PRESENT
RTS D5	IF THE INDICATOR IS BLANK THERE IS NO DATA PRESENT IF THE INDICATOR IS RED THERE IS MARK DATA PRESENT
	IF THE INDICATOR IS GREEN SPACE DATA IS PRESENT
CTS D6	IF THE INDICATOR IS BLANK THERE IS NO DATA PRESENT IF THE INDICATOR IS RED THERE IS MARK DATA PRESENT
	IF THE INDICATOR IS GREEN SPACE DATA IS PRESENT