

FIBER OPTIC / RS-232C ADAPTOR

The FTR is a small adaptor plug which provides bi-directional conversion between standard RS-232C serial ports and fiber optic cables. The device has a standard 25-way D connector which can be connected to any standard RS-232C receptacle, and it accepts Hewlett-Packard snap-in connectors with plastic cored fiber optic cables up to 40 meters in length.

The device is ideal for establishing noise-free data transmission between computers and peripherals, avoiding ground loops and errors caused by pick-up of transients and interference radiated from industrial equipment. The device also allows data transmission through the voltage gradients often found in ion beam equipment.

Specifications

RS-232C signals	input: ± 3 volts minimum, ± 30 volts maximum output: ± 9 volts nominal
RS-232C connector	25-way D type, male plug
RS-232C pin assignments	pins 2 and 3 used for transmit and receive signals as selected by pin jumpers inside the device. pins 4, 5, 6, 8, and 20 may be pulled high by installing jumpers to assert auxiliary signals as required by RS-232C equipment. pins 11, 12, and 13 can power the device (see below). Pin 1 is case ground, pin 7 is signal ground.
Fiber optic ports	individual send and receive ports to accept H-P HFBR-4501 and HFBR-4511 connectors, with plastic fiber optic cables up to 40 meters in length.
Baud rates	50 baud to 40k baud
Power source	9 to 12Vac/dc 100mA max. input from plugpack, or 5Vdc regulated or 8 to 15Vdc unregulated from RS-232C device, jumpered from pins 11, 12, or 13 to FTR circuitry – may require internal wiring change to RS-232C device.
Dimensions	80 x 58 x 19 mm overall
Typical applications	a) two FTRs and two fiber optic cables replace wired bi-directional link for reduced error rate and/or security of confidential data, or for traversing a voltage gradient. b) Two FTR units used as a two-way fiber optic repeater. c) allow fiber optic Group3 instruments to be used with RS-232C equipment.