

FTR



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 plugs into any standard RS-232C receptacle, and accepts Hewlett Packard snap-in fiber optic cables HFBR-3500 series up to 25 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 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, 13 can power 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-3500 fiber optic cables up to 25 meters
Baud rates	50 baud to 40 kilobaud
Power source	9 to 12Vac/dc 100mA max. input from plug pack; or 5Vdc regulated or 8 to 15V unregulated from RS-232-C device can be jumpered from pins 11, 12, or 13 to FTR circuitry - may require internal wiring change to RS-232C device.
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 Group 3 devices (teslameter) with fiber optics to be used with RS-232C equipment.