

RS-485/RS-232/OPTICAL FIBER CONVERTER

1 Introduction

BOSI™ RS-485/RS-232 optical fiber converter are used to realize optical fiber communication of PC , MCU ,intelligent instruments. BOSI Electronics invented port-powered RS-232/ optical fiber converters, including multi-mode and single-mode fiber. All BOSI RS-232/ optical fiber converters and RS-485/ optical fiber converters are world's smallest size!

With media of optical fiber, the communication system resist high voltage, electro-magnetic disturbance and thunder. BOSI™ RS-232/ optical fiber converters,RS-485/ optical fiber converters are widely used in industry process control, electric power system automation, transportation control.

2 Installation

OPT485-9 type RS-485/RS-232/ optical fiber converters are DB-9/DB-9 sized. The DB-9(female) is connected to the wire terminals including RS-485,RS-422! When the wire terminals are moved, the DB-9 female of OPT485-9 is a standard 3-wire RS-232!It is with a pair of ST type optical fiber socket.

OPT485EX and OPT485EXS type RS-485/ optical fiber repeating converters are DB-25/DB-25 sized. It is with two pairs of ST type optical fiber socket. There is a cable in the middle, connecting DC5V power supply and RS-485 port.

OPT485 and OPT485S type RS-232/ optical fiber converters are DB-25/DB-25 sized. One side of DB-25(male) can be connected to RS-485 (half-duplex), RS-422(full-duplex) and RS-232. It is with a pair of ST type optical fiber socket. OPT485 and OPT485S need DC5V power supply(<50mA).

The deep gray ST socket is receiver, and the light gray ST socket is sender. The sender is connected to the receiver of another converter with optical fiber.

3 feature

BOSI OPT series RS-485/RS-422/ optical fiber converters support up to 115.2Kbps of baud rate。 No initialization setting is needed! No software modifying is needed ! BOSI electronics has unique electric power stolen technique and zero-time-delay auto TXD/RXD enabling technique. BOSI OPT series RS-232/RS-485/ optical fiber converters are suited for all software.

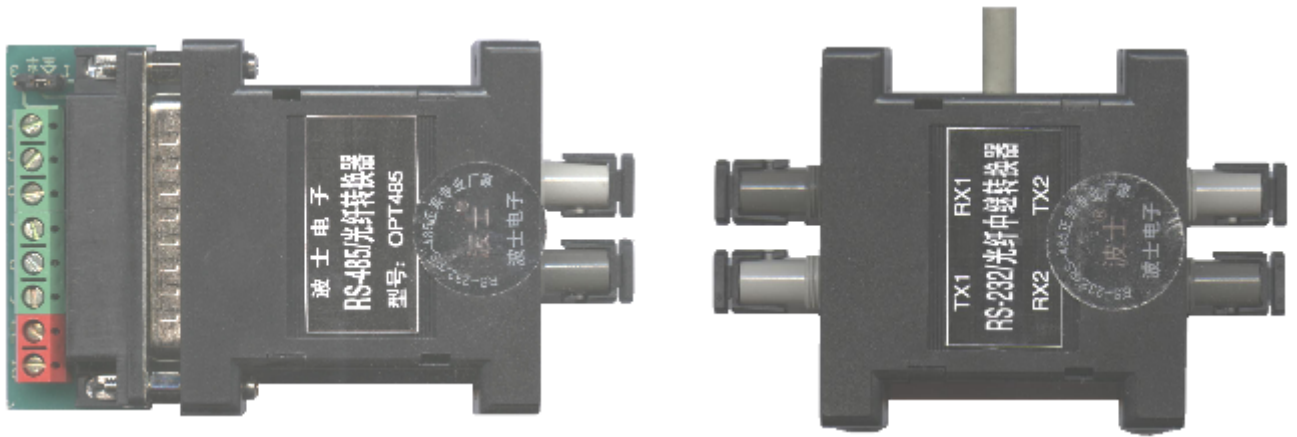
socket	ST (or FC can be also offered)
media	Multi or single mode optical fiber
electronic interface	RS-232(DB-9 female)
	RS-485/RS-422/RS-232 (terminals)
size	about 17*55*70mm

Wave length	820nm (Multi mode)
	1300nm (Single mode)
weight	90 grams
distance	4Km (Multi mode)
	50Km (Single mode)
Fiber type	50/125、62.5/125、100/140um

4 photos



(to be continued)



5 Usage

RS-232 (without terminal)

The DB-9 port of OPT485-9 can be plugged to a standard DB-9 RS-232 port of PC, only RXD-2、TXD-3、GND-5 are needed.



RS-485 HALF DUPLEX (J1—半、J2-ON、J3-ON)

ONLY ONE “+5V GND” IS CONNECTED TO POWER!



(to be continued)

RS-422 FULL DOPLEX (J1—全、J2-OFF、J3-OFF)

ONLY ONE “+5V GND” IS CONNECTED TO POWER!



type	function	power	fiber type
OPT232-9	RS-232/optical fiber converter(DB-9/DB-9 sized)	No power!	multi-mode
OPT232	RS-232/optical fiber converter(DB-9/DB-25 sized)	No power!	multi-mode
OPT232S	RS-232/optical fiber converter(DB-9/DB-25 sized)	No power!	single-mode
OPT485-9	RS-485/RS-422/RS-232/optical fiber converter	DC 5V	multi-mode
OPT485	RS-485/RS-422/RS-232/optical fiber converter	DC 5V	multi-mode
OPT485S	RS-485/RS-422/RS-232/optical fiber converter	DC 5V	single-mode
OPT232EX	RS-232/ optical fiber repeating converter	DC 5V	multi-mode
OPT232EX	RS-232/ optical fiber repeating converter	DC 5V	single-mode
OPT485EX	RS-485/RS-422/ optical fiber repeating converter	DC 5V	multi-mode
OPT485EX	RS-485/RS-422/ optical fiber repeating converter	DC 5V	single-mode

BOSI also supplies DC5V power and optical fiber.