

485C/485TC

U485C

485A/485TA

U485A

BOSI[®] RS-232/RS-485/RS-422 Converter

1 Introduction

BOSI RS-232/RS-485/RS-422 converters are used to extend RS-232 communication distance to 1200m (9600bps). They are also used to establish multi-drop communication system of PC-PC or PC-MCU, etc. BOSI electronics is ISO9002 certified. BOSI RS-232/RS-485/RS-422 converters won gold medal of 2000 international measurement and control exhibition.

2 Hardware Installation

All Model products are DB-9/DB-9 size. The DB-9 side of converter can be directly plugged into DB-9 port of RS-232 socket (male). If RS-232 port of your PC is DB-25, then a DB-9/DB-25 adaptor is needed.

DB-9:2-RXD,3-TXD,5-GND.

DB-25:2-TXD,3-RXD,7-GND.

It is suggested that RS-485 (or RS-422) must GND-connected. All RS-485 (or RS-422) port in the same net should have common GND. If distance is over 100m or high voltage exists, then you'd better use optical-isolated converters.

3 Software

No software settings, no driving software is needed! Only RXD, TXD, GND of RS-232 are needed. RTS or DTR is not used. BOSI converters support all software of RS-232.

4 Characteristics

Model	Function	Feature	Power
485C	RS-232/RS-485/RS-422 converter	Full or half duplex	Port-powered
485TC	Optical-isolated RS-232/RS-485/RS-422 converter	Full or half duplex	Port-powered
485A	RS-232/RS-485 converter	half duplex	Port-powered
485TA	Optical-isolated RS-232/RS-485 converter	half duplex	Port-powered
U485C	Optical-isolated RS-232/RS-485/RS-422 converter	Full or half duplex	5V DC
U485A	Optical-isolated RS-232/RS-485 converter	half duplex	5V DC

C-series are only converters support Full & half duplex multi-drop communication simultaneously.
T-series are world's only converters of port-powered optical-isolated RS-232/RS-485/RS-422 converters.

RS-485 always means half-duplex. RS-422 always means full-duplex. Model 485C and 485A support up to 115.2Kbps. Model U485C and U485A support up to 9600bps ($DC5 \pm 0.5V$, $<50mA$), and also can be port-powered just as non-optical-isolated converter (through jump pin setting). Model 485TC and 485TA support up to 9600bps/57600bps and need no power supply!

BOSI RS-232/RS-485/RS-422 converters are 128-nodes type. Optical isolated RS-232/RS-485/RS-422 converters can isolate 2500V voltage.

5 Photos of products





PIN DISCRIPTION

DB-9 male of 485C or 485TC(half duplex):

	8-9	1-5	2-4	3
Jump set		RS-485(+A)	RS-485(-B)	GND(地)

* 1-5 connected as (+A) of RS-485.

** 2-4 connected as (-B) of RS-485.

DB-9 male of 485C or 485TC(full duplex):

7-8		1 (RS-422)	2 (RS-422)	4 (RS-422)	5 (RS-422)	3
Jump set		TX(+Y)	TX(-Z)	RX(-B)	RX(+A)	GND

485A/485TA DB-9 MALE	1	2	3
	RS-485(+A)	RS-485(-B)	GND

U485C has just one more than 485TC: (no half/full duplex set):	6
	+5V

If U485C set J1 ON and J2 ON, then U485C is port-powered!

U485A DB-9 male	1	2	6	3
	RS-485(+A)	RS-485(-B)	+5V	GND

If U485A set J1 ON and J2 ON, then U485A is port-powered!