



User's Guide for TSXPCX3030 + programming cable

Summary:

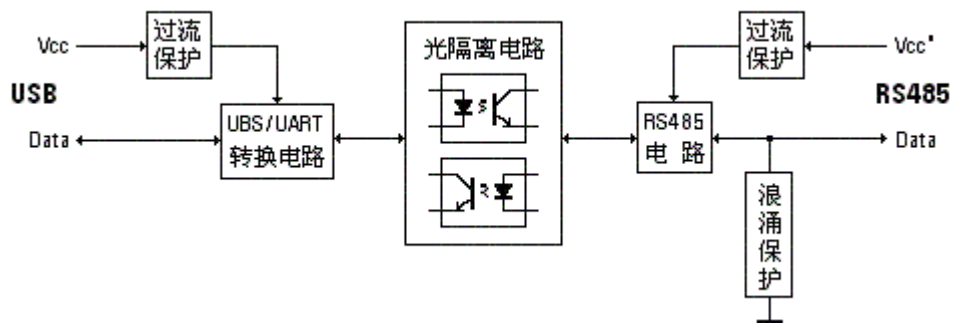
TSXPCX3030+ is a multi-function programming cable which is provided the serial connection and RS485 signal conversion through the USB interface. The cable is the model of photoelectric isolation, with the flow, swell, and transient over-voltage protection circuitry, which can be hot plug, support the long-distance communications.

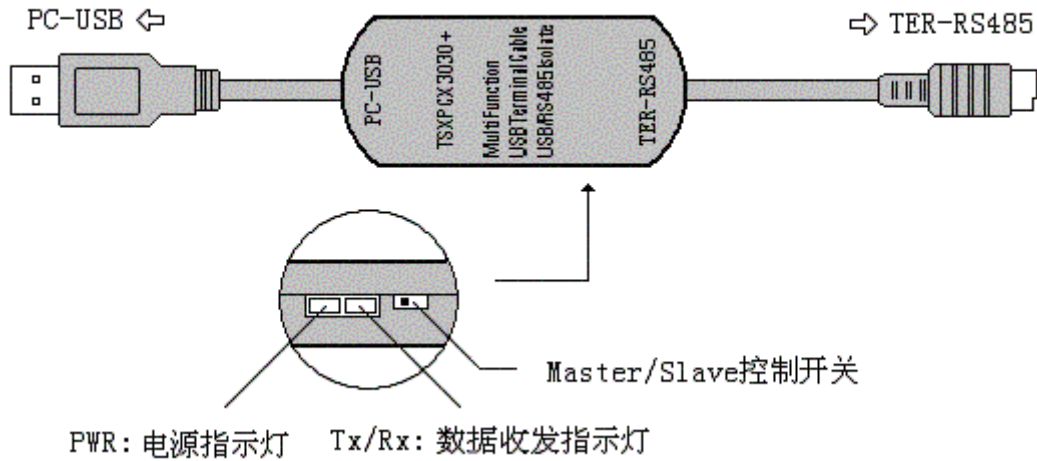
TSXPCX3030 + can be used for Modicon TSX Series PLC and PC or other equipment which don't provide the traditional serial port for communication. The cable can connect with TSX Premium (57), TSX Micro (37), TSX Nano (07), TSX Naza (08) and the TER of Twido PLC.

Two snap switch located on the TSXPCX3030+ programming cable are used to choose a different mode of operation. The cable rejected the way which the transceivers of the RS485 is controlled by the PLC, and all the data transceivers is automatic controlled. It can be used for multi-point and point-to-point communications applications.

TER ports of the TSX Series PLC have a DPT signal pin, which is used to determine the work methods of the terminal TER. If the DPT for high-level, TER always work in the Uni-Telway Master (main station) mode, so the PLC programming in the corresponding way. If the DPT low-level, the work methods of TER decide by the PLC.

Product configuration





Switch M / S corresponding mode

Switch	Function	DPT level	the Control flow of data
M	PLC works in main-station model for programming or as Uni-Telway Master for more points communications	1	auto
S	PLC works in slave-station model for other multi-point communication	0	auto

This product is the USB to RS485 isolated converters which with the protection, so it's need to use the power of USB port and TER port. Due to the AUX expansion communications interface of PLC has no power-pin, the product do not support Communicating with AUX port.

Features and technological index:

- support Windows2000/Windows XP operating system

- fully compatible with USB V1.1 norms and USB CDC V1.1
- USB-bus powered and PLC TER port power supply at the same time
- voltage of Optical Isolator: 1000 VDC (up to 3000 VDC, it should be declared when making an order).
- baud rate: 300 bps ~ 1Mbps automatically adaptive.
- apply to the TSX Premium, Micro, Naza, Nano and Twido
- each PC only supports a TSXPCX3030 + cable
- Length: 3 meters, colors: black

Usage:

TSXPCX3030+ needs to install USB device drivers at first. And to communicate with PLC needs the latest version of the Uni-Telway or MODBUS driver.

The Uni-Telway version which can support TSXPCX3030+:

Win2K/XP V1.6

WinNT4/95/98/Me/DOS do not support

The MODBUS version which can support fTSXPCX3030+:

Win2K/XP V1.1

WinNT4/95/98/Me/DOS do not support

These drivers are usually included in the programming software on CD-ROM. And for the specific installation steps, please refer to the instruction files on the CD-ROM drivers, and details are not necessarily listed here.

After the installation, icons will appear on the control panel of WINDOWS as follows:



Double-click on the icon, then achieve the settings, XWAY Test, MODBUS Test communications test of the serial ports (COM slogan) which is connected with TSXPCX3030+ cables. Then the programming software can be used to complete the normal communication with the PLC.

Long-distance communications:

The largest communications range between the TSXPCX3030+ and PLC are up to 2 kilometers (9600 bps), when external plus terminals 120 ohm resistance, an 100mA power and a 5 VDC power on the RS485 ports (8 pin Mini DIN Male) of the cable. And a FSACC01 Isolators Box (Schneider's model: TSXPACC01) is need to install at the end of PLC. 0.5 mm² unshielded twisted pair lines are used for Communications. When the distance is Over 500m, a RS485 repeaters (model: E485GP, a four-star electronic products), can be installed in the bus for extending the distance.

Please Note: USB interface cable cannot be extended.

