I-7530

Intelligent RS-232 to CAN converter

Introduction

CAN (Controller Area Network) is a serial bus system especially suited to structure intelligent industry devices networks and build smart automatic control systems. The following figure shows the application architecture for I-7530 modules. The PC can be the CAN host, monitor or HMI to access/control the CAN device through the CAN network by the I-7530 Converter. The programmable RS-232 device (For example: I-8411/I-8431/I-8811/W-8031/W-8331/W-8731 embedded controller) can use the serial port to connect to the CAN network via the I-7530 module. In order to use the CAN network with traditional RS-232 devices, we provide a way to achieve this purpose. The I-7530 is designed to unleash the power of CAN bus via RS-232 communication method. It accurately converts messages between CAN and RS-232 networks. This module let you to communicate with CAN devices easily from any PC or devices with RS-232 interface.

3000V isolation on CAN side

The CAN port of I-7530 is an isolated with 3000V isolation. This isolation can protect the local RS-232 devices from the damage signal coming from CAN network.

Watchdog inside

The I-7530 Watchdog is a hardware reset circuit to monitor the I-7530's operation status. When working in harsh or noisy environment, the I-7530 may be down by the external signal. The circuit may let the I-7530 to work continuously and never halt.

Power and Error indicator display

There are two indicators on the I-7530.The

Features

- Microprocessor inside with 20MHz
- CAN interface connector: D-Sub 9-pin
- 82C250 CAN transceiver
- One CAN and RS-232 Port
- Built-in CAN/RS-232 Converter firmware
- Max transmission speed up to 1M bps for CAN and 115.2K bps for RS-232
- Software configurable CAN and RS-232 communication parameters
- Max transmission distance over 1000m (follow CAN specification)
- Support both CAN 2.0A and CAN 2.0B
- Build-in jumper to select 120 ohm terminal resister
- Mount easily on DIN-rail
- Power, data flow and error indicator for CAN and RS-232
- Watchdog inside

Specifications

- RS-232 interface connector: D-Sub 9-pin
- CAN interface connector: D-Sub 9-pin
- Isolation voltage: 3000Vrms on the CAN side
- Repeater request: over than 1000m (suggestion)
- Communication speed:
  115.2K bps max for RS-232
  1M bps max for CAN
- Accessories: One D-Sub 9-pin cable
- Operating temperature: -25℃ to +75℃
- Storage temperature: -40℃ to +80℃

Command Sets

- Dimensions: 123mm x 72mm x 33mm
- Power requirement: Unregulated 10~30 Vdc with protection from power reversals
- Power consumption: 1W

Applications

- Factory Automation
- Building Automation
- Home Automation
- Control system
- Monitor system
- Vehicle Automation

Software Utility Feature:

- CAN bus Baud rate configuration
- CAN acceptance filter configuration

power indicator can help user to check whether the I-7530 is standby or transmitting/receiving messages. The Error indicator will be turned on when some errors occur on the I-7530.

- CAN 2.0A or 2.0B specific selection
- RS-232 Baud rate and data bit setting
- RS-232 checksum selection
- RS-232 responded selection
- Easy test to transmit/receive can messages
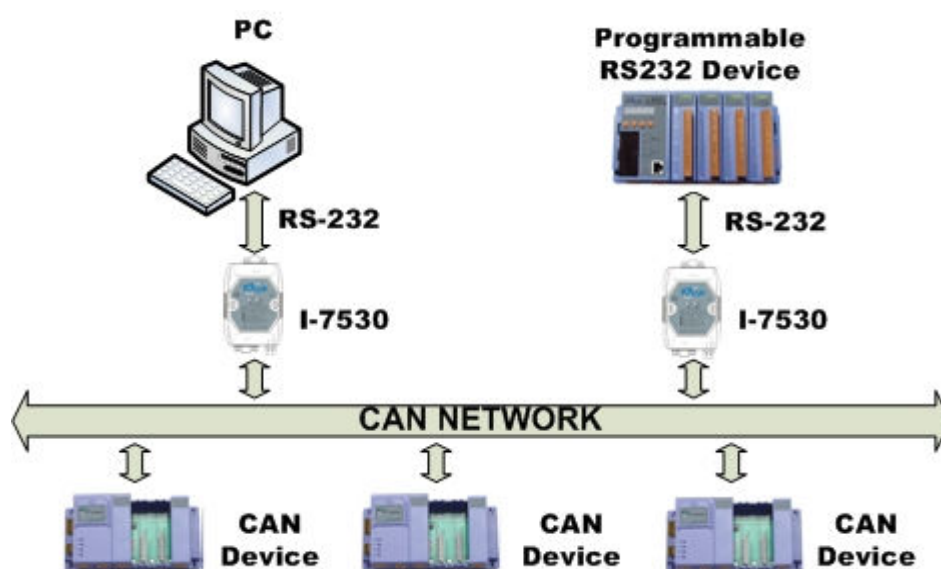
Ordering Information

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