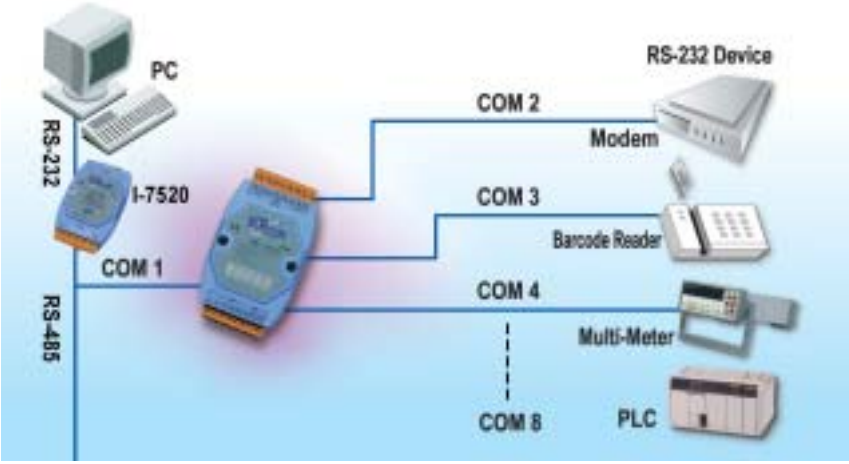
I-7521/I-7521D/I-7522/I-7522D/I-7522A/I-7522AD/
I-7523/I-7523D/I-7524/I-7524D/I-7527/I-7527D



Introduction

There are many RS-232 devices in industry applications. Nowadays it becomes important to link all those RS-232 devices together for automation & information collection. Usually those RS-232 devices are far away from the host-PC & widely distributed in the factory. So it is not a good idea to use multi-serial cards to connect all these RS-232 devices together. Our I-752N series products can be used to link multiple RS-232 devices using a single RS-485 network. The RS-485 is famous for it's easy maintenance, simple cabling, reliablity and low cost. When the user wants to connect RS-232 devices to 10 BaseT, our I-7188EN series products can meet this demand.

Can be used as an Addressable RS-485 to RS-232 Converter

Basically our I-752N products are Master-type converters. The I-752N uses our R.O.C. Patent 086674. Other competitor's converters are Slave-type and can't work independently without a host-PC. In real industrial application, the demand is different case by case and customers are not satisfied with Slave-type devices. The I-752N is very powerful and can analyse the local RS-232 device, D/I or D/O without a host-PC.

Can be used as an Embedded Controller
Can be used as RS-485 to RS-232 Device Server

The Device Server is an appliance that network enables any device with a serial communication port. Our Intelligent Communication Controllers allow those devices to become connected to the RS-485 network.

i-752N Intelligent Communication Controller SERIES

Features

- COM1 of the I-7521, I-7522, I-7522A, I-7523, I-7524 and I-7527 can be
□ used as RS-232 port or RS-485 port
- COM1 can be used to downolad programs.
- Built-in "Addressable RS-485 to RS-232 Converter" firmware
- Support Dual-Watchdog commands
- Support Power-up value & safe value for D/O
- I-7521 support one RS-232 device
- I-7522 support two RS-232 devices
- I-7522A support one RS-232 and one RS-422 device
- I-7523 support three RS-232 devices
- I-7524 support four RS-232 devices
- I-7527 support seven RS-232 devices
- Watchdog timer provides fault tolerance and recovery
- R.O.C. Invention Patent No. 086674, No. 103060, No. 132457

Specifications

- CPU: 80188;□20MHz; for I-7521/7522/7523
□□□□ 40MHz; for I-7522A/7524/7527
□ SRAM:□128K bytes for I-7521/7522/7523
□□ 256K bytes for I-7522A/7524/7527
- Flash ROM:□512K bytes for I-7522A/7524/7527
□□□ 256K bytes for I-7521/7522/7523
- EEPROM: 2048 bytes
- Communication speed: 115.2K bps max.
- RS-232 interface connector: Male DB-9 or screw terminal block
- RS-485 interface connector for I-7521/7522/7523: 13-pin screw terminal
□ block (accept 16~26 AWG wires); 3.81mm pitch
- D/I: 3.5V~30V
- D/O: 100mA/30V
- Operating temperature: -25¡C to +75¡C
- Storage temperature: -40¡C to +80¡C
- Dimensions: 123mm x 72mm x 33mm
- Power requirement: Unregulated 10~30 VDC power
- Power consumption: 2W (without display)
□□□□ 3W (with display)

Applications

- Factory Automation
- Building Automation
- Home Automation

I-752N Communication Controller Selection Guide

Model Number	I-7521/ 7521D	I-7522/ 7522D	I-7522A/ 7522AD	I-7523/ 7523D	I-7524/ 7524D	I-7527/ 7527D
CPU (80188)	20M	20M	40M	20M	40M	40M
SRAM	128KB	128KB	256KB	128KB	256KB	256KB
Flash	256KB	256KB	512KB	256KB	512KB	512KB
COM1 Port Program Download	RS-232/ RS-485 (Note1)	RS-232/ RS-485 (Note1)	RS-232/ RS-485 (Note2)	RS-232/ RS-485 (Note1)	RS-232/ RS-485 (Note2)	RS-232/ RS-485
COM2 Port	RS-485 (Note3)	RS-485 (Note3)	RS-485	RS-485 (Note3)	RS-485	RS-485
COM3 Port	—	RS-232 (Note4)	RS-422 (Note6)	RS-232 (Note4)	RS-232 (Note4)	RS-232 (Note5)
COM4 Port	—	—	—	RS-232 (Note5)	RS-232 (Note4)	RS-232 (Note5)
COM5 Port	—	—	—	—	RS-232 (Note4)	RS-232 (Note5)
COM6 Port	—	—	—	—	—	RS-232 (Note5)
COM7 Port	—	—	—	—	—	RS-232 (Note5)
COM8 Port	—	—	—	—	—	RS-232 (Note5)
D/O	3	1	5	—	1	1
D/I	3	3	5	2	1	1
user Defined I/O	3	—	—	—	—	—
Real Time Clock	—	—	Y	—	Y	Y
Embedded O.S.	MiniOS7	MiniOS7	MiniOS7	MiniOS7	MiniOS7	MiniOS7

Note1: RS-232/RS-485
RS-485: D1+, D1-; Self-tuner inside
RS-232: TXD, RXD, RTS, CTS, GND
DB-9 male connector

Note2: RS-232/RS-485
RS-485: D1+, D1-; Self-tuner inside
RS-232: TXD, RXD, RTS, CTS, GND

Note3: RS-485 (D2+, D2-; Self-tuner inside);
3000V isolation

Note4: RS-232 (TXD, RXD, RTS, CTS, GND)

Note5: RS-232 (TXD, RXD, GND)

Note6: RS-422 (RXD3+, RXD3-, TXD3+, TXD3-, GND)

Ordering Information

- **I-7521:** Intelligent Communication Controller
- **I-7521D:** I-7521 with display
- **I-7522:** Intelligent Communication Controller
- **I-7522D:** I-7522 with display
- **I-7522A:** Intelligent Communication Controller
- **I-7522AD:** I-7522 with display
- **I-7523:** Intelligent Communication Controller
- **I-7523D:** I-7523 with display
- **I-7524:** Intelligent Communication Controller
- **I-7524D:** I-7524 with display
- **I-7527:** Intelligent Communication Controller
- **I-7527D:** I-7527 with display

Options

- **PWR-24/110:** Wall-plug Power Adaptor/110VAC, 60Hz, 3.6W
- **PWR-24/220:** Wall-plug Power Adaptor/220VAC, 50Hz, 3.6W
- **PWR-24/230:** Wall-plug Power Adaptor/230VAC, 50Hz, 3.6W