



# MicroSmart Pentra RS232C Communication Module

- Features**
- Up to 5 modules can be added to a MicroSmart Pentra Slim CPU
  - Allows MicroSmart Pentra Slim to communicate with up to 7 serial devices
  - Up to 3 modules can be added to a MicroSmart Pentra All-In-One CPU allowing communication with up to 5 serial devices.
  - Communicate with HMIs, variable frequency drives (VFD), barcode readers, RFID equipment, printers, additional CPUs, displays, PCs, web servers, etc.
  - Screw termination for easy wiring
  - The communication circuit is isolated from the internal circuit allowing for high noise resistance
  - Maximum baud rate: 38.4 kbps



## Specifications

General Specifications	
Number of Channels	1
Synchronization	Start-stop synchronization
Electrical Characteristics	EIA RS232C compliant
Maximum Delay in One Scan	Approx. 4 ms
Operating Temperature	0 to 55°C
Operating Humidity	10 to 95% RH (no condensation)
Recommended Cable Specifications	Shielded multi-core cable 24AWG x 6
	Dielectric strength 2000 V/min
	Insulation resistance 100 MΩ/km
Maximum Cable Length	3m
Connector on Mother Board	MC1.5/10-G-3.81BK (Phoenix Contact) Applicable terminal block: FC4A-PMT10P (supplied)
Isolation from Internal Circuit	Transformer isolated
Maximum Number of Communication Modules	Slim type CPU module 5 max.
	All-in-one 24-I/O type CPU module 3 max. (see note below)
Internal Current Draw	85 mA (5V DC)
	0 mA (24V DC)
Weight	Approx. 100g

Note: Use only the Slim MicroSmart Pentra CPU to connect to the expansion RS232C communication modules in combination with the function modules listed below (not applicable to the FC5A-C24R2 all-in-one module).

Function Module	Type No.
Analog I/O Module	FC4A-L03A1, FC4A-L03AP1, FC4A-J2A1, FC4A-J4CN1, FC4A-J8C1, FC4A-J8AT1, FC4A-K1A1, FC4A-K2C1
AS-Interface Master Module	FC4A-AS62M

## Notes

1. WindLDR version 5.10 or higher is required.
2. Applicable FC5A CPU firmware is version 1.10 or higher.
3. WindLDR version 5.10 allows for firmware upgrade.

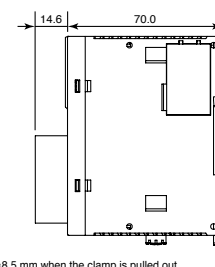
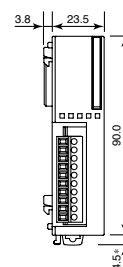
## Communication Specifications

Communication Parameters	Baud Rate (bps)	1200, 2400, 4800, 9600, 19200, 38400
	Data Bits	7 or 8
	Parity	Odd, even, none
	Stop Bits	1 or 2
Protocol	Maintenance Communication	Possible (except for user program download and upload)
	User Communication	Possible

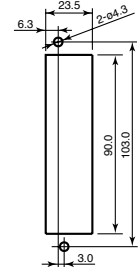
## Terminal Arrangement

Terminal	I/O	Description
RS (RTS)	Output	Request to Send (constant voltage terminal)
ER (DTR)	Output	Data Terminal Ready
SD (TXD)	Output	Transmit Data
RD (RXD)	Input	Receive Data
DR (DSR)	Input	Data Set Ready
SG (SG)	—	Signal Ground
NC	—	No connection
⊕	—	Functional ground (can be used as junction terminals of functional ground; not connected to the internal circuit)
⊕	—	
⊕	—	

## Dimensions (mm)



## Mounting Hole Layout



\*8.5 mm when the clamp is pulled out.

