A1. Overview

The Ladder Communication module can be used with an FA-M3 CPU module for RS-232-C communications. The F3RZ81-0F has one and the F3RZ82-0F has two D-sub 9-pin connectors, or ports, which support a maximum transmission distance of 15 m. Each port operates independently and a communications error at one port does not affect the operation of the other port.

Any input relay of the Ladder Communication module may be used to raise an interrupt.

Table A1.1 Models of Ladder Communication Module

Model	Description
F3RZ81-0F	RS-232-C ladder communication module, one port
F3RZ82-0F	RS-232-C ladder communication module, two ports

A2. Specifications

A2.1 Standard Specifications

■ Model and Suffix Codes

Model	Suffix Code	Style Code	Option Code	Description
F3RZ81	-0F	·····	·····	Max 115.2 kbps, one RS-232-C port
F3RZ82	-0F	·····	·····	Max 115.2 kbps, two RS-232-C ports

■ Operating Environment

The F3RZ81-0F and F3RZ82-0F may be used with all CPU modules.

■ General Specifications

Item	Specifications	Item	Specifications
Operating temperature	0 to 55°C	Storage temperature	-20 to 75°C
Operating humidity	10 to 90% RH (non-condensing)	Storage humidity	10 to 90% RH (non-condensing)
Operating environment	Must of free of corrosive gases, flammable gases and heavy dust		

■ Physical Specifications

Item	Specifications		Item	Specifications	
Interface	EIA RS-232-C compliant		Current consumption	F3RZ81-0F	320 mA
				F3RZ82-0F	350 mA
Number of ports	F3RZ81-0F	1 (not isolated)	External dimensions	28.9 (W) x 100 (H) x 83.2 (D) mm*	
	F3RZ82-0F	2 (not isolated)			
Transmission distance	15 m max.		Weight	F3RZ81-0F	120 g
				F3RZ82-0F	120 g
Connector	D-Sub 9-pin (female), M2.6 (mm)				

*: Dimensions excluding protrusions. For details, see the External Dimensions drawing.

■ Function Specifications

Item		Specifications	Default
Connection method		Point to point	—
Transmission mode		Full-duplex/half-duplex	—
Synchronization		Start-stop synchronization	—
Communication protocol		No protocol	—
Data format	Character length	7 or 8 bits	*1 (see next page)
	Stop bits	1 or 2 bits	*1 (see next page)
	Parity bit	None, even or odd	*1 (see next page)
Transmission speed		300, 600, 1200, 2400, 4800, 9600, 14400, 19200, 28800, 38400, 57600, 76800, or 115200 bps	*2
Control lines	RS control	(1) Always on. (2) Turn on before sending.	(1)
	DR check	(1) Ignore DR when sending. (2) Send only when DR is on.	(1)
	CD check	(1) Ignore CD when sending. (2) Send only when CD is off.	(1)
	ER control	(1) On (ready) (2) Off (not ready)	(1)
Communication buffer	Send buffer	Text buffer (3584 bytes max.) *3	—
	Receive buffer	8192-byte rotary buffer (FIFO buffer)	—
Format of received text	Start character	- Yes or no - Any single character	No
	End character (terminator)	- Yes or no - Up to 2 characters long, any characters - Also used as send terminator.	$0D and $0A (CR-LF)