

Serial interface 1xRS232, 3xRS232/422/485

RIFLEX M1 RS232/RS485 serial interface

Type:

RMRS204.R

Order #:

0067520.001

The interface module RS204/x is used to connect four asynchronous serial interfaces to the M1 controller via the I/O bus.

**Features**

- four 9 pin DSub connectors COM1, COM2, COM3, COM4 usable as full RS 232, reduced RS 232, RS 422, RS 485 or TTY interface
- yellow state indicating LED for ready (RDY)
- 2 pin connector for the necessary external power supply on isolated variants
- DIP switch to connect/disconnect the integrated termination resistors
- monitoring of the external supplying voltage

As many serial interface modules RS204 as module slots are available, may be used in a controller system. Any combination of RS204/x modules with other input/output modules is allowed. Nevertheless, the maximum capacity of the power supply module must be considered.

Interface Module	RS204/R
isolation towards bus	yes, 500 V
power supply	internal, via backplane BS 2xx + external
current consumption via backplane	120 mA @ 5 V DC

Error messages

Error message	Meaning
Voltage (module)	Error in the internal power supply or in the external supply or in the supply through the bus rails.

Layout of the Interfaces of RS204/x

Variant	COM1	COM2	COM3	COM4
RS 204/R	RS 232	(RS 232) RS 422 RS 485	(RS 232) RS 422 RS 485	(RS 232) RS 422 RS 485



remark: (RS 232) indicates a "reduced" RS 232 interface without the handshake lines DTR, DSR, DCD and RI.

Technical Data of the Interfaces

Interface	RS232	RS422	RS485
max. baudrate* Bps	115.200		921.600
signal level	± 12 V	RS 422	RS 485
polling	yes		
interrupt	yes		
terminating resistor	no	via DIP switch	
operation modes	handshake- lines	full duplex	halve duplex

* the following transfer rates can be selected by software:

300; 1200; 2400; 4800; 9600; 19,2k

External Power Supply

External Power Supply	Description
input voltage, nominal	24 V DC
input voltage, range	18 .. 34 V DC
input voltage, peak value, if t < 1 s / min	40 V DC
power consumption	max. 125 mA @ 24 V DC
reverse connection protection	yes



remark: There is no galvanic separation between external power supply and interfaces.

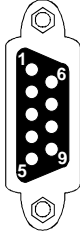
Pin Assignments


Connectors are shown as seen from the cable, not from the module side!

Connector	Pin	Signal	Description
(RS232) RS 422 RS 485 DSub9wL 	1	+TX	Transmit Data+ (RS 422)
	2	RXD	Receive Data (RS 232)
	3	TXD	Transmit Data (RS 232)
	4	-TX	Transmit Data- (RS 422)
	5	GND	Ground
	6	+RX	Receive Data+ (RS 422) / Data+ (RS 485)
	7	RTS	Request To Send (RS 232)
	8	CTS	Clear To Send (RS 232)
	9	-RX	Receive Data- (RS 422) / Data- (RS 485)

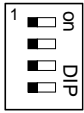


attention: No nullmodem cable may be connected to the combined serial interfaces as signals would be short-circuited, which would lead to damage of the module. Suitable cables are described in Index 4.

Connector	Pin	Signal	Description
RS232 complete DSub9wL 	1	DCD	Data Carrier Detect
	2	RXD	Receive Data
	3	TXD	Transmit Data
	4	DTR	Data Terminal Ready
	5	GND	Ground
	6	DSR	Data Set Ready
	7	RTS	Request To Send
	8	CTS	Clear To Send
	9	RI	Ring Indicator

External Power Supply	Pin	Signal	Description
	1	+	external power supply + 24V
	2	-	external power supply ground

DIP Switch For Terminating Resistors

DIP Switch	Switch	Channel	Description
	S 1	COM1	terminating resistor for COM1 on/off
	S 2	COM2	terminating resistor for COM2 on/off
	S 3	COM3	terminating resistor for COM3 on/off
	S 4	COM4	terminating resistor for COM4 on/off



remark: Terminating resistors can be connected for differential interfaces (RS 422/485) via DIP switches. These are located under the foam cover below the COM 4 connector.
No terminating resistor is needed for RS 232 interfaces.

Order Codes for Modules and Accessories

Order Code	Description
RMRS204.R	interface module 1x RS 232 + 3x RS232/422/485
RMKZ51.02	Terminal set with label strips

Rittmeyer AG Grienbachstr. 39 Postfach 2558 CH-6302 Zug	Rittmeyer GmbH Postfach 1908 DE-70709 Fellbach Raiffeisenplatz 6 DE-70736 Fellbach	Rittmeyer Ges.m.b.H Walküregasse 11/2/1 Postfach 73 AT-1152 Wien	Rittmeyer Italiana s.r.l. Via Valbona 43 IT-24010 Ponteranica (BG)	Rittmeyer S.A. Calle Julián Camarillo 26-3º Apartado 35145 ES-28037 Madrid
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