

V100-17-RS4 V100-17-RS4X RS232/485 Module

This guide provides specifications for Unitronics' communication modules V100-17-RS4, V100-17-RS4X.

You can find additional information, such as wiring diagrams, in the product's installation guide located on the Unitronics' Setup CD and in the Technical Library at www.unitronics.com.

V100-17-RS4 (not isolated) V100-17-RS4X (isolated) Serial Modules

Use these modules to add an additional serial communication port to the controller.

- Use RS232 to download programs from a PC, and to communicate with serial devices and applications, such as SCADA.
- Use RS485 to create a multi-drop network containing up to 32 devices.

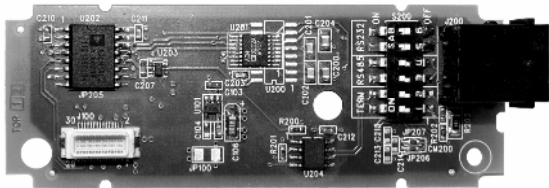
The modules are identical except for isolation. Module ports are type RJ-11 and may be set to **either** RS232 or RS485 via wiring and DIP switch settings, in accordance with the table on page 2.

To connect a PC to a port that is set to RS485, remove the RS485 connector, and connect the PC to the PLC via the programming cable. Note that this is possible only if flow control signals are not used (which is the standard case).

Standard Kit contents

RS232/485 Module

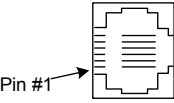
RS485 cable



- Signals are related to the controller's 0V; the same 0V is used by the power supply.
 - Do not connect the device directly to a telephone or telephone line.
- Caution
- Note that the V100-17-RS4 port is not isolated. If the controller is used with a non-isolated external device, avoid potential voltage that exceeds $\pm 10V$. To avoid damaging the system, all non-isolated device ports should relate to the same ground signal.

Pinouts

The pinouts below show the PLC port signals.

RS232		RS485**		Controller Port 
Pin #	Description	Pin #	Description	
1*	DTR signal	1	A signal (+)	
2	0V reference	2	(RS232 signal)	
3	TXD signal	3	(RS232 signal)	
4	RXD signal	4	(RS232 signal)	
5	0V reference	5	(RS232 signal)	
6*	DSR signal	6	B signal (-)	

*Standard programming cables do not provide connection points for pins 1 and 6.

**When a port is adapted to RS485, Pin 1 (DTR) is used for signal A, and Pin 6 (DSR) signal is used for signal B.

RS232 to RS485: Changing DIP Switch Settings

The port is set to RS232, termination ON, by factory default.

	Switch Settings					
	1	2	3	4	5	6
RS232*	ON	ON	OFF	OFF	ON	ON
RS485	OFF	OFF	ON	ON	OFF	OFF
RS485 with termination**	ON	ON	ON	ON	OFF	OFF



*Default factory setting

**Causes the unit to function as an end unit in an RS485 network

V100-17-RS4 V100-17-RS4X Technical Specifications

RS232 Port Specifications

Voltage limits	±20V
Input voltage	±20VDC absolute maximum
Cable length	15m maximum (50 feet)

RS485 Port Specifications

Input Voltage	-7 to +12V differential max.
Cable type	Shielded twisted pair, in compliance with EIA RS485
Cable length	1200m maximum (4000 feet)
Baud rate	300– 115,200 bps
Nodes	Up to 32

Isolation

V100-17-RS4	No
V100-17-RS4-X	Yes

Weight

V100-17-RS4/X	12.6g (0.44 oz)
---------------	-----------------

The information in this document reflects products at the date of printing. Unitronics reserves the right, subject to all applicable laws, at any time, at its sole discretion, and without notice, to discontinue or change the features, designs, materials and other specifications of its products, and to either permanently or temporarily withdraw any of the forgoing from the market.

All information in this document is provided "as is" without warranty of any kind, either expressed or implied, including but not limited to any implied warranties of merchantability, fitness for a particular purpose, or non-infringement. Unitronics assumes no responsibility for errors or omissions in the information presented in this document. In no event shall Unitronics be liable for any special, incidental, indirect or consequential damages of any kind, or any damages whatsoever arising out of or in connection with the use or performance of this information.

The tradenames, trademarks, logos and service marks presented in this document, including their design, are the property of Unitronics (1989) (R"G) Ltd. or other third parties and you are not permitted to use them without the prior written consent of Unitronics or such third party as may own them