

The **Micha** RS485 and USB Port (PN **102 439**) is a combined Port and Datalogger and replaces previous versions 101915 and 101916. The module allow the end user to directly communicate with the controller via a USB port or RS485 port on a PC or laptop. The module allow 'snapshots' of the current status to be downloaded and displayed, and the Data Logger has the ability to log the status at 15, 30 or 60 minute intervals, allowing in excess of two months of historical data to be stored.

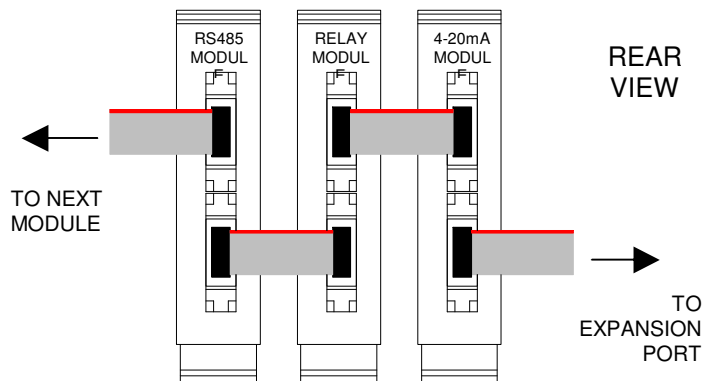
The module is also available as an RS485 and USB port without datalogging, **Micha** PN **103217**.

Connection to the module is made to the expansion port of the MSRx controller with the ribbon cable supplied. An on-board DC-DC supply provides electrically-isolated communications to both the USB port and a plug-in terminal connector, allowing wiring to din-rail terminals, or directly to other equipment.

Fitting and Inter-connection of Modules

The modules clip onto standard 35mm symmetrical and 32mm asymmetrical din-rail. Each unit is supplied with 10-way IDC ribbon cable assemblies for connection to the controller Expansion Port and to an adjacent Din-rail unit.

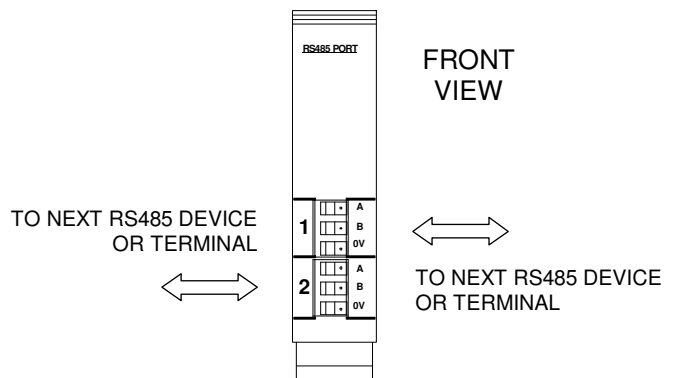
Note: all ribbon-cable connections should be made before the controller is powered up. Cables can be plugged into either upper or lower connectors. No connection should be made between modules of different controllers.



Connection of multiple RS485 Modules

Connection to the RS485 bus can be made to either of the terminal blocks as the A, B and 0V terminals are commoned internally.

Note: only one RS485 Port module may be used with any single controller.





Module Setup:

To setup the module, navigate to the 'Set Exp Module - Comms Port/Log' screen on the main controller settings menu, press **Select**, and use the following procedure:

Display	Screen	Description
		<i>To move between screens, press Down to move to the next screen or Up to return to the previous screen.</i>
Comms Module: Select: Standard	1	Press Select , then Up/Down to change: Disable / Standard / Modbus Press Select to accept the change.
Comms Module: Address: 01	2	See note below regarding multiple controllers. To change: Press Select , then Up/Down to change the Module Address. Press Select to accept the change.
Modem Module: Select: Disable	3	If a Modem Module is connected: Press Select , then Up/Down to change: Disable / Type 1 / Type 2 Press Select to accept the change.
Data Log Module: Select: Disable	4	If the port has Data Logging: Press Select , then Up/Down to Enable or Disable the module. Press Select to accept the change. <i>If Data Logging is disabled, press Menu to exit the port setup, otherwise press Down to move to the next screen.</i>
Data Log Module: Log per: 30 mins	5	Press Select , then Up/Down to change the logging period. Press Select to accept the change.
Data Log Module: Clk: Year: 2006	6	Data Log Module Clock- Year setting: Press Select , then Up/Down to change the year. Press Select to accept the change.
Data Log Module: Clk: Month: Jul	7	Data Log Module Clock- Month setting: Press Select , then Up/Down to change the month. Press Select to accept the change.
Data Log Module: Clk: Date: 13	8	Data Log Module Clock- Day setting: Press Select , then Up/Down to change the Day. Press Select to accept the change.
Data Log Module: Clk: Hours: 12:34	9	Data Log Module Clock- Hours setting: Press Select , then Up/Down to change the Hours. Press Select to accept the change.
Data Log Module: Clk: Mins: 12:34	10	Data Log Module Clock- Minutes setting: Press Select , then Up/Down to change the Minutes. Press Select to accept the change. <i>Press Menu to exit setup and accept changes..</i>

Note: Screen 2 - If multiple controllers of the same type are to be connected to the same port, the module number is used for address purposes. (e.g. if two MSR_x Charge Controllers are connected together, set the first to #1 and the second to #2.)

Module Specification: Input/Output Insulation: 1,000VDC for 1 second Power Consumption: 200mW
RS485 : EIA RS-485, differential mode.

Note: A **maximum** of 1W may be drawn from the controller expansion port. Where the total consumption of all modules exceeds this value, an auxiliary PSU module **must** be used.

*The **POWER LED** will be lit continuously, the **COMMS LED** is illuminated during communication with the module.*