

Introduction

The 4x64 rectifier multiplexer board adds support for an additional 192 rectifiers by multiplexing four RS485 channels into the single channel provided by the ACX Advanced controller.

When the multiplexer is installed with an ACX Advanced controller the internal menu structure is automatically modified so that it displays the 4 channels one of which can be selected to view data about the associated rectifiers.

Similarly, when the controller is interrogated using the PowCom™ remote access software channel selection is automatically enabled in the software.

The 4x64 will also communicate with the ACX Advanced Extension & Alarm Relay board extending a number of other system functions into multiple cabinets such as are used in Guardian Central.



ORDERING GUIDE

HZZ02009GU – Direct chassis mount

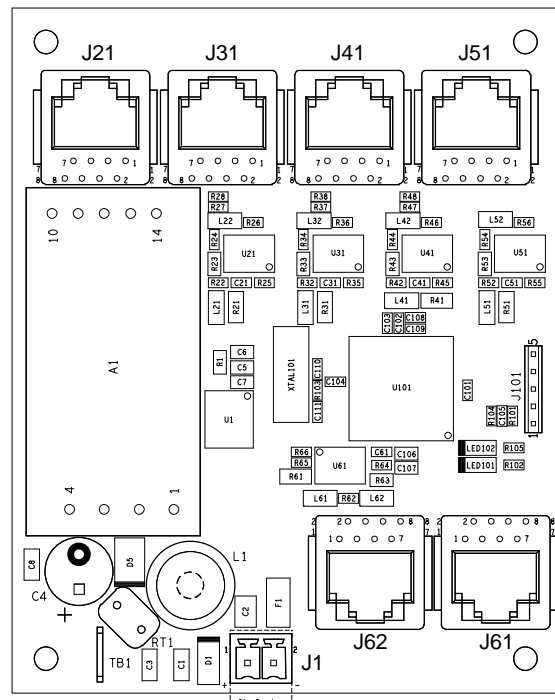
HZZ02010GU – DIN rail mount

Electrical Characteristics

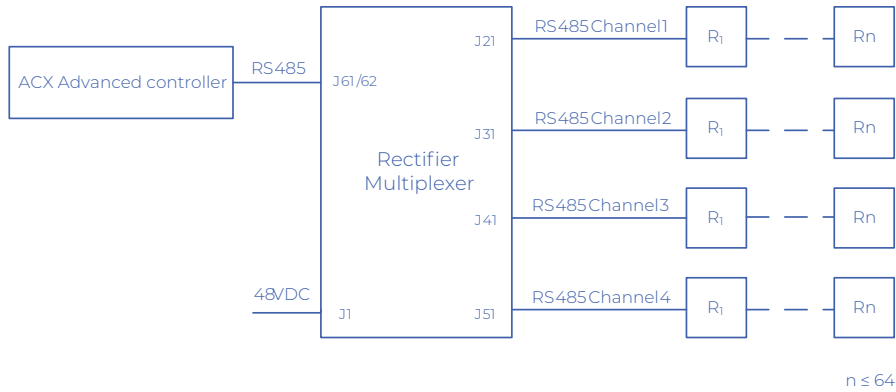
Input voltage	48VDC nominal
Input voltage range	16.8-75VDC
Input current	1.4A max.

Connections

J1	48VDC power supply
J21	RS485 Channel 1
J31	RS485 Channel 2
J41	RS485 Channel 3
J51	RS485 Channel 4
J61, J62	RS485 to ACX Advanced controller



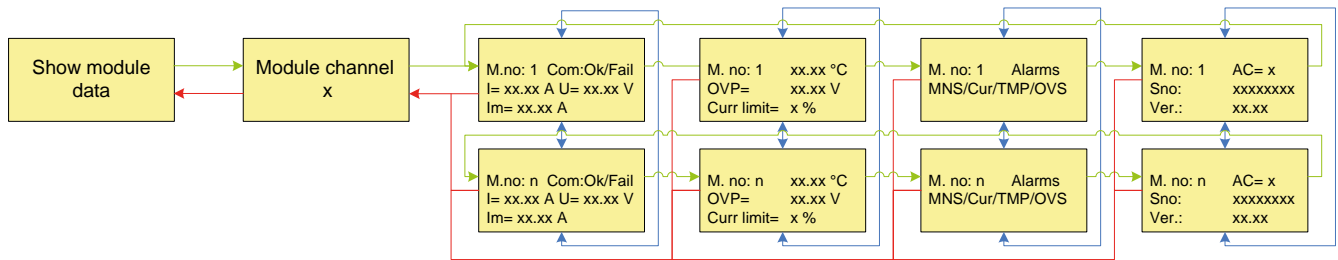
Application Diagram



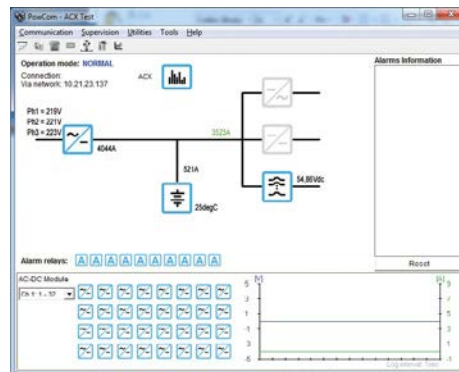
Note: It is highly recommended to split the rectifiers between the channels proportionately. It will then provide a better response of the system (e.g., current share balance).

Rectifier supervision

When the Rectifier Multiplexer is installed with the ACX Advanced controller the internal menu structure is automatically adjusted so that it displays the 4 channels, one of which can be selected to view data about the associated rectifiers.



Similarly, when the controller is interrogated using the PowCom™ remote access software channel selection is automatically enabled in the software.



For more information about the rectifier data reporting function see the [ACX Advanced controller](#) and [Powcom™](#) manuals.

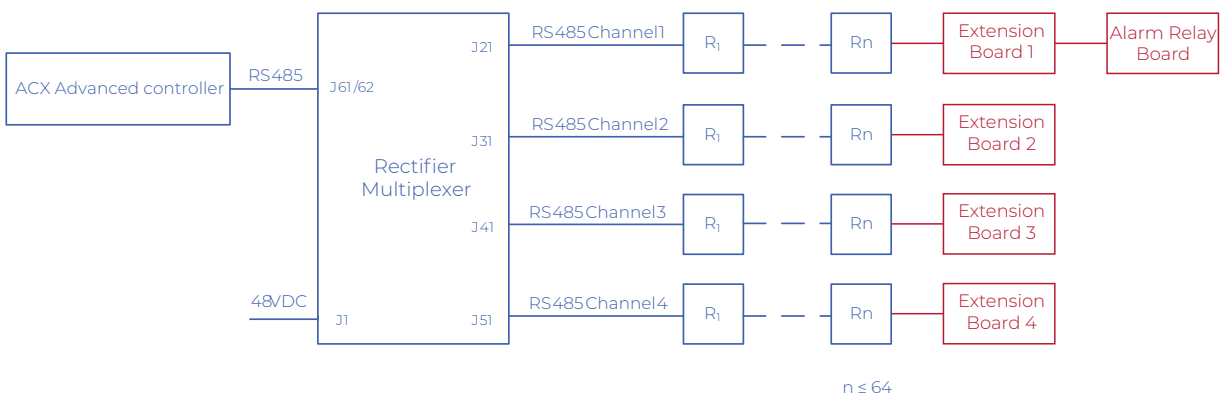
Support for additional ACX Advanced Extension & Alarm Relay boards

The 4x64 will also communicate with the ACX Advanced Extension & Alarm Relay boards.

The ACX Advanced Extension Board is usually required for higher capacity systems like the Guardian Central. It is physically installed in the Extension cabinet and the battery distribution unit. It adds following functionality to the default ACX Advanced control package:

- extended LVD and PLD control
- additional 2 x temperature probe inputs
- additional 12 x multipurpose analogue inputs
- battery current measurement
- load and battery breaker monitoring
- additional 2 x digital inputs and outputs

The Alarm Relay Board adds an additional 6 x alarm relays and is limited to one per channel.



IMPORTANT NOTE

The following are required to fully support the 4x64 rectifier multiplexer:

- ACX Advanced Controller with firmware version 2.18 or later.
- ACX Advanced MIB file version 1.10 or later.
- PowCom™ Software version 5.01.00 or later.

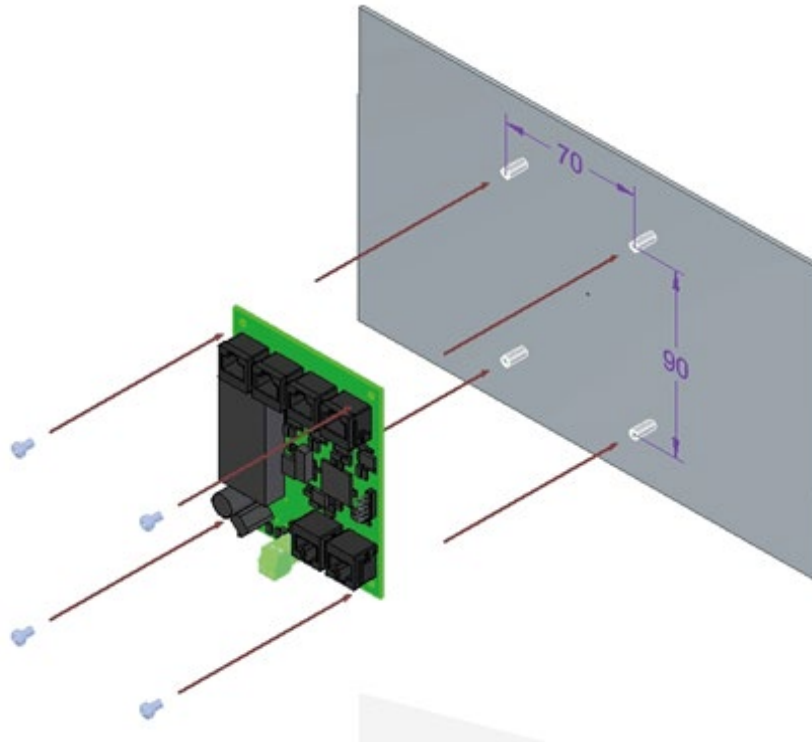
All of the above are available for download from the UNIPOWER web site.

See the [ACX Advanced Manual](#) appendix A for full instruction for updating the firmware.

Installation

There are 2 options for installation into the power system depending on the part number ordered:

1. HZZ02009G - Direct mount to the panel or chassis when using 4 x M2.5 screws and appropriate threaded standoffs.



2. HZZ02010G - DIN rail mount (Weidmuller RS 100 housing).

