

AmsMODBUS

Data sheet

Connections

I/O	Comments
A-Bus	A-Bus client module
MODBUS	The AmsMODBUS module is a generic MODBUS master module used for general connection to the AmsCPU module and thereby the AmpWeb application. Connect the MODBUS A and B signals to the corresponding signals on the MODBUS device. If possible, also connect the GND. For a list of register parameters, see the latest version of the "AmsMODBUS Register Map" document. The MODBUS A and B signals are internally daisy-chained for easy installation.

Physical Specifications

Top part of unit cover

Material	Lexan 940
Color	Gray (RAL 7035)
Self-extinguishing	Acc. To UL94-VO

Base part of unit cover

Material	Noryl VO 1550
Color	Black (RAL 7021)
Self-extinguishing	Acc. To UL94-VO
Mounting	DIN-rail (EN50022)

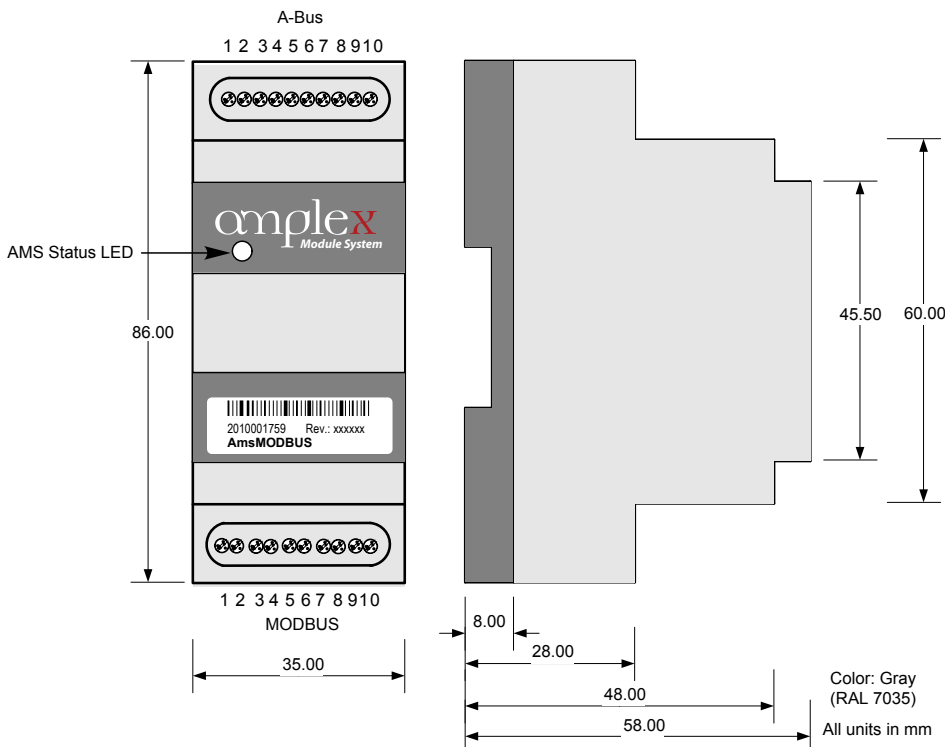
Operational specs

Operating temp.	-20° C to +65° C
Max. humidity	90% (non-condensing)
IP grade	IP20

Dimensions

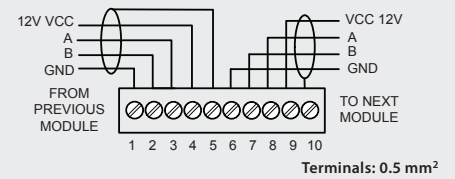
Width	35 mm
Height	86 mm
Depth	Max. 58 mm

Drawing

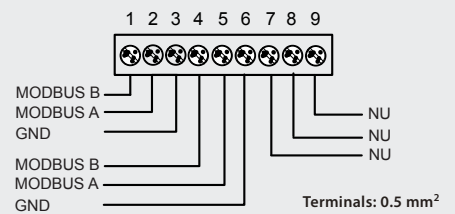


I/O Schematic

A-Bus Connection



MODBUS connection



AmsMODBUS



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Technical Specifications

Processor Details

Family	MSP430
MIPS	4 MIPS
Instruction set	16-bit RISC

Memory Details

RAM	4 KB
FLASH	56 KB

Functionality

Topic Comments

Subsystem software	AmsMODBUS comes fully programmed with the generic AmsMODBUS software.
Communication	A-Bus two-way communication with the AmsCPU module. MODBUS two-way half-duplex communication with the MODBUS device.
Autodiscovery	The module is automatically discovered by the AmsCPU. In case a module is disconnected from the AmsCPU, this is reported to the server application and the module is listed as missing. If the module is reconnected to the AmsCPU or another AmsCPU, it is redetected by the system.
Real-time clock	The real-time clock is automatically synchronized with the AmsCPU module.
Watchdog and Brown-out reset	Watchdog and Brown-out reset ensure that the system is up and running at all times.

Reliability & Maintainability

Topic Comments

Software upgrade	Software is automatically upgraded from the AmsCPU module.
Swapping of new software	New software is swapped without shutting down the module, except when restarting the module with the new software.
Self-test	Self-test is performed after power-up.

All specifications are subject to changes

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