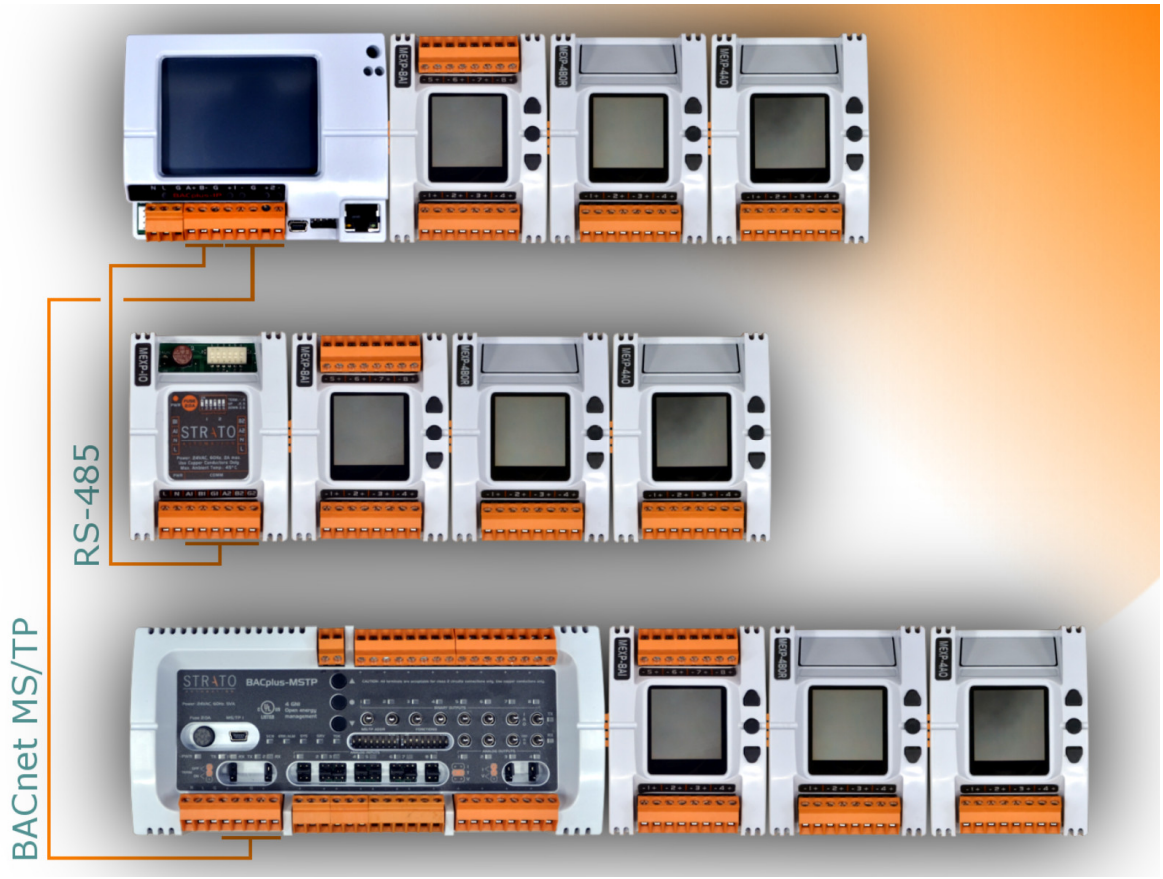
MEXP Expansion Modules
MPWR5 Power Supply
Strato Modular Accessories

Description

- The MEXP expansion modules are I/O accessories that can used with the BACplus-IP and the BACplus-MSTP
- A single BACplus-IP can control up to 500 I/O's by combining various modules and the BACplus-MSTP can control up to 200 I/O's by combining various modules
- All I/O modules feature a local display with 3 buttons for local visualisations and overrides
- All I/O models are addressable via the local display
- The MEXP-IO allows for full redundancy and isolation of each DIN rail of the control cabinet. It enables simple and efficient extension of the BACplus-IP and BACplus-MSTP controller architecture in the most flexible manner based on project needs
- The MPWR5-24 is a universal power supply module that can be used for various power supply requirements like Vdc power output for 4-20 mA transmitters
- To order, use part numbers listed in the tables below

Application

These accessories are designed to facilitate control and management of equipment typically used in the HVAC industry. They allow powerful yet flexible solutions that can be tailored and sized according to any project needs.



Models available I/O modules

Model numbers	MEXP-8AI	MEXP-4AO	MEXP-4BO	MEXP-4BOR
I/O set	8 x AI/BI's	4 x AO's	4 x BO's Solid State	4 x BO's Relay Type
Power consumption	0.9 VA	3.6 VA	1.2 VA	2.4 VA

Power supply

Power is supplied to I/O modules via the BACplus-IP, the BACplus-MSTP or the MEXP-IO

Each module has a different current draw. Make sure you do not exeed the maximum 2.0 A output of the BACplus-IP, BACplus-MSTP and MEXP-IO

Each BACplus-IP or -MSTP with a fused 2.0 A output can drive a varied quantity of I/O modules based on the total VA requirement of all I/O modules combined

When the maximum VA is attained (Ex. 2.0 A at 24 Vac = 48 VA total maximum) you need to add supplementatry MEXP-IO power isolator with a new fused 2.0 A output for more I/O modules in your panel assembly

I/O specifications

8 x AI/BI's universal inputs

- Thermistor 10KΩ (type 2 or 3)
- Voltage 0 - 10 Vdc (Input impedance of 20 KΩ)
- Current 0-20 / 4-20 mA (Input impedance of 350Ω)
- Resolution: 16 Bits (65536 segments)
- Dry contact, 500 ms minimum (On-Off)

4 x AO's

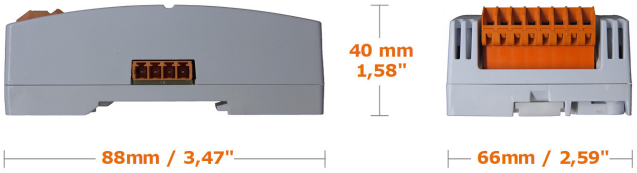
- Voltage 0 - 10 VCC linear (up to 12 mA)
- Current 0-20 / 4-20 mA (from 250Ω to 500Ω)
- Resolution: 16 Bits (65536 segments)

4 x BO's Solid State

- 10 to 30Vac/Vdc, 1A max.
- Fully isolated. Need external power feed
- Each power feed can be combined with local jumpers
- « sink » and with overcurrent protection
- Thermal protection with automatic reset
- Solid State BO's can be used as pulse outputs

4 x BO's Solid State

- 10 to 30Vac/Vdc, 2A max.
- Normally opened contacts
- Fully isolated. Need external power feed
- Each power feed can be combined with local jumpers



Models available power modules

Model numbers	**MEXP-IO**	**MPWR5-24**
Use	Isolation module for each DIN rail of MEXP I/O modules in the control cabinet for redundancy of application of when the power output of 2.0A of the BACplus-IP and – MSTP is exceeded	Universal power supply module that can be used for various power supply requirements like Vdc power output for 4-20 mA transmitters
		

Power functions	Power isolation module for I/O exppension modules
	Power supply input:
	• 24 VAC/VDC ± 15%
	• 48 VA maximum
	• D.E.L. power light indicator
	Power supply output:
	• 24 VAC/VDC ± 15% (based on power input)
	• 2.0A replaceable fuse (48 VA maximum typical at 24 Vac nominal)
		Power isolation module for I/O exppension modules
		Power supply input:
		• 24 VAC/VDC ± 15%
		• 48 VA maximum
		• D.E.L. power light indicator
		Power supply output:
		• Selectable: 5 Vdc, 9 Vdc, 12 Vdc and 24 Vdc
		• Dual mode available with jumpers:
		  ○ Half rectified (Output ref/ common is input ref/ common) Default settings
		  ○ Full rectified floating mode (Output ref/ common is input Vac/Vdc average)
		• 1.5 A maximum or up to 12 Watts
		• Protected with a 2.0A replaceable fuse

Other specifications

Microprocessor:
STM32 (ARM CortexTM M3)
32 bits, 100MHz
(Except power modules)
I/O modules addressing:
Addressing via the local I/O module display
Expansion (I/O Boards) communication speed:
Local bus at 460800 Bps
I/O modules communication protocols:
Proprietary protocol
Dimensions:
88.3 mm x 191 mm x 42 mm
3,5” x 7,5” x 1,6”
Max. wire size:
16 awg

Stocking temperature:
-30 °C to 50 °C / -22 °F to 122 °F
Operating conditions:
0 ° C to 45 ° C / 32 ° F to 113 ° F
10% to 90% H.R. without condensation
Weight:
114g / 0.251 lb
Mounting type:
Quick mount on DIN rail or with a retractable screw clip system.
Warranty:
1 year
Enclosure:
White color, ABS material UL94VO
Certifications:
UL 916 Energy Management Equipment