

MetaCenter I/O

Sullivan-Palatek®

Identification: MetaCenter I/O
Part number: Refer to Product guide / price list for specific part number or contact dealer
Product Family: MetaCenter
Function: Provides general purpose I/O (input/output) for a MetaCenter system enhancing monitoring capabilities and providing distributed system automation.
Definition: I/O controller with enhanced software features & functions
Capacity: 8 x Digital inputs
 4 x Analogue Inputs
 16 x Virtual Relay outputs (6 physical)
Supported protocol: **Air^{RS485}** & Modbus RTU via dedicated network gateway
Software: Pre-programmed application software, configurable via password protected operator interface

Product overview:

MetaCenter I/O provides additional general purpose I/O (input/output) for a MetaCenter system, enhancing monitoring capabilities and providing distributed system automation. More than one MetaCenter I/O can be installed in a system (refer to MetaCenter Mgmt system unit for MetaCenter I/O capacity).

Digital inputs can be used to monitor switching contact devices each rated @ 24vDC, 10mA (minimum), configurable via software \rightarrow open or \rightarrow closed circuit with 4 configurable conditions and additional virtual relay configurability for 'delay time', 'reset' & 'pulse count' functions. The pulse count function can be used for metering (for example m³, ft³, kWh) providing an accumulative count of pulses from a metering device.

Analogue inputs can be used to monitor sensor devices (for example: pressure, differential, temperature, dew point, flow, current, power, bearing condition sensors). Each input is equipped with adjustable high or low level detection that can be used to activate an Alarm or High Level Alarm or used for system-wide automation. MetaCenter I/O analogue inputs can function (the purchase of alternative analogue condition modules may be required) with digital NO or NC, 0-10vDC, 0 – 20mA, 4-20mA, 0 – 20mA earth referenced, 4-20mA earth referenced, KTY, RTD, PT100, PT1000 & 10k NTC. 27 'unit texts' can be assigned via software configuration and covering the majority of units of measure.

Relay outputs use 'Virtual Relay Automation' technology and are totally configurable with duel input logic functions. Relay functions can be assigned utilising any status or condition information available on a MetaCenter **Air^{RS485}** system network from any compatible unit connected to the network.

MetaCenter I/O features 16 configurable 'virtual relays', each relay can be separately configured. 'Virtual Relay' is a configurable system-wide automation concept that allows output relay functions to respond to any 'virtual relay' condition, status or signal function available in the MetaCenter I/O or from a compatible MetaCenter unit on the system network.



Local (L) or Remote (R): defined automatically Function Type (A, T, S, R, F): Alarm, Trip, Signal state, Relay state, Status function

F_n = A BBB C DD

System Unit (SYS, C01 – C12, B01 – B12): location of function status information Function Definition: Defines a specific input function (see function list)

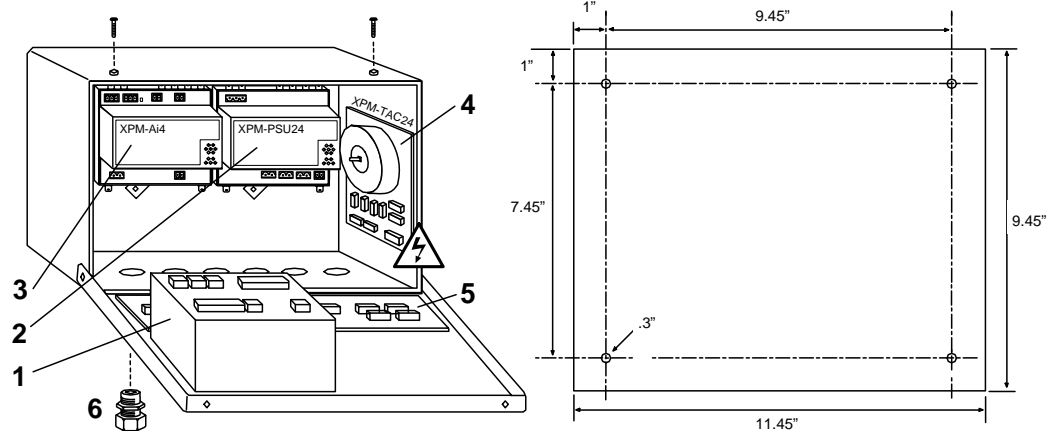
Virtual relays have the capability to accept 2 input functions and apply 'logic' (IF, AND, OR, XOR) to determine the appropriate output response.

The 'normal' relay state plus delay ON & OFF are configurable parameters.

MetaCenter I/O is equipped with 6 'physical' relay contact outputs (R1 – R6). The function of each relay is determined by the set-up of the equivalent 'Virtual Relay'. For example R1 can activate Table 3 by connecting the output terminals of R1 to the 'Activates Table 3 input' terminals.

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 Capacity: 8 x Digital inputs
 4 x Analogue Inputs
 16 x Virtual Relay outputs (6 physical)
 Processor: 16bit ST10 Micro-processor
 Op. interface: Back lit LCD
 Software: Pre-programmed application software, configurable via password protected operator interface
 Protocol: **Airbus** & Modbus RTU via dedicated network gateway
 Supply / Power: 230Vac +/- 10%, 115Vac +/- 10%, 50VA
 Enclosure rating: IP54 / NEMA12
 Dimensions: Height: 9.5" (241mm) x Width: 11.45" (291mm) x Depth: 6" (152mm)
 Access: Front, lockable, hinged access panel
 Cable entry: Bottom, gland cable entry system
 Weight: 14 lb (6.4kg)
 Mounting: Wall, 4 x screw fixing
 Temperature: Min 32°F (0°C) Max 115°F (+46°C)
 Humidity: 95% RH non-condensing
 Approvals: CE, UL, cUL



- Item – description**
 1 Unit, Controller
 2 Unit, XPM-PSU24
 3 Unit, XPM-Ai4
 4 Unit, XPM-TAC24
 5 PCB, Terminal
 6 Gland, Set PG 13.5

Analogue input display units:

mBr	BAR
PSI	kPa
mPa	dP
°C	°F
m³m	m³h
cfm	m³
ft³	L/s
L/m	L/h
rpm	spm
dBn	kW
kWh	mV
V	kV
mA	A
%	

- Special function relays:**
 Timer relays
 Pulse relays
 Compressor status relays (available, running, loaded)
 SCR relays (e.g. dryer sequencing from dew point AI)
- Refer to technical documentation or dealer for additional info

