PAC8000 Remote I/O

The Control Solution for Process Industries

Introduction

PAC8000 Remote I/O is a completely modular I/O solution for both general purpose and hazardous area applications. Based upon a carrier system, PAC8000 supports a wide range of modules and I/O functions, including intrinsic safety signals. An open architecture allows communication with a variety of different fieldbuses by selecting the appropriate type of Bus Interface Module (BIM).

Designed to resist extreme temperatures, humidity, corrosive materials, shocks, and vibration, PAC8000 delivers full specification performance in even the harshest environments. In ATEX environments PAC8000 excels – all components can be mounted and live worked in Zone 2 / Division 2 and ATEX Zone 1 hazardous areas. The I/O includes types that can be connected directly to intrinsically safe (Exi) or increased safety (Exe) field wiring.

PAC8000 Remote I/O integrates seamlessly with PACSystems solutions and is connected via PROFINET or Modbus TCP to RX3i and RSTi-EP controllers.



Harsh & Hazardous Area Operation

PAC8000 can go where other products cannot. They can be field mounted and subjected to the following:

- -40°C to +70°C operating range
- ISA Level G3 corrosion
- 30g shocks and 5g vibration
- Operation in Class I, Division 2 and Zone 2 hazardous areas with I/O module field wiring including intrinsically safe (Exi) and increased safety (Exe) options
- Supports UL HAZLOC C1D1 and ATEX Zone 1 hazardous areas with I/O module field wiring including intrinsically safe (Exi) and increased safety (Exe) options

High Availability

PAC8000 supports PROFINET System Redundancy (PNSR), enabling synchronized independent controllers to service the I/O and transition from active to back-up controller without interruption. With controllers separated up to 10 kilometers from each other, processes will be resilient from physical disruption. Consider unplanned downtime a thing of the past.

Variety of I/O Modules

Beyond just analog and digital I/O, a broad range of PAC8000 I/O modules are available, including options for low-level instrumentation, AC mains, and intrinsically safe signals. 4, 8, 16, and 32 field channels modules are available, and all modules provide comprehensive diagnostic information.

Ordering Information

BUS Interface Modules & Carriers

Part Number	Description	Part Number	Description
8515-BI-PN	PROFINET Scanner Module, Two 100Mbps copper interface	8752-CA-NS	Universal Node Services Carrier
8522-EB-MT	Ethernet Bus Interface	8755-CA-NS	EBIM carrier

General Purpose

Part Number	Description	Part Number	Description
8101-HI-TX	8-channel AI, 4-20mA with HART	8119-VI-05	8-channel Voltage Input, 1-5Vdc
8102-HO-IP	8-channel AO, with HART for 4-20mA	8121-DI-DC	16-channel DI, 24Vdc non-isolated, module powered
8103-AI-TX	8-channel AI, 4-20mA	8122-DI-DC	16-channel DI, 24Vdc isolated, sinking
8104-AO-IP	8-channel AO, 4-20mA	8125-DI-DC	32-channel DI, non-isolated, module- powered
8105-TI-TC	4-channel THC/mV input	8127-DI-SE	32-channel SOE module
8106-TI-RT	4-channel RTD input	8129-IO-DC	8-channel Supervised Discrete I/O
8109-DI-DC	8-channel DI, 24Vdc isolated, sinking	8132-AI-UN	8-channel Isolated Universal Analog Input 4-20mA, Thermocouple, RTD, Voltage
8110-DI-DC	8-channel DI, 24Vdc non-isolated, module powered	8133-HI-TX	8-Channel Supervised AI with HART
8111-DI-AC	8-channel DI, 115Vac isolated, sinking	8139-SH-DC	126-channel Addressable Smoke and Heat
8112-DI-AC	8-channel DI, 115Vac non-isolated, module powered	8140-DI-AC	16-channel Digital Input, 115VAC isolated, sinking
8114-DI-AC	8-channel DI, 230Vac non-isolated, module powered	8142-DO-DC	16-channel Digital Output, 12-42VDC, module powered
8115-DO-DC	8-channel DO, 2-60Vdc non-isolated, module powered	8810-HI-TX	8-Channel Safety AI, 4-20mA with HART
8117-DO-DC	8-channel DO, 2-60Vdc isolated, unpowered	8811-IO-DC	8-Channel Safety DI/DO, 24VDC, module-powered
8118-DO-AC	8-channel DO, 20-250Vac isolated, unpowered		

Intrinsically Safe I/O

Part Number	Description	Part Number	Description
8201-HI-IS	8-channel Intrinsically Safe Analog Input, 4-20mA with Hart	8206-TI-IS	8-channel Intrinsically Safe RTD input
8202-HO-IS	8-channel Intrinsically Safe Analog Output, 4-20 mA with Hart	8215-DO-IS	4-channel Intrinsically Safe Digital Output, solenoid driver IIC gas groups
8204-AO-IS	8-channel Intrinsically Safe Analog Output, 4-20 mA	8220-DI-IS	16-channel Intrinsically Safe Digital Input, switch/promixmity detector
8205-TI-IS	8-channel Intrinsically Safe THC/mV input		

Field Terminals and Accessories

Part Number	Description	Part Number	Description
8601-FT-NI	Field terminal, non-incendive (Div 2)	8617-FT-NI	Field Terminal, non-incendive, for 16 ch DI
8602-FT-ST	Field terminal, standard	8618-FT-MT	16-pin Mass Termination Assembly (Div 2)
8603-FT-FU	Field terminal, non-incendive, fused (Div 2)	8619-FT-MT	44-pin Mass Termination Assembly (Div 2)
8604-FT-FU	Field terminal, fused	8620-FT-MT	Field terminal assembly
8605-FT-TC	Field terminal, thermocouple	8621-FT-IS	Intrinsically Safe Field terminal, standard
8606-FT-RT	Field terminal, RTD	8622-FT-IS	Intrinsically Safe Field terminal, loop-disconnect (not for 8 channel DI)
8607-FT-TC	Field terminal, 8-channel with T/C	8623-FT-IS	Intrinsically Safe Field terminal for 8220-DI-IS
8608-FT-NI	Field terminal, 8-channel, non-incendive	8624-FT-IS	Intrinsically Safe Field terminal with loop- disconnect
8610-FT-NA	Field terminal, non-arcing (Div 2)	8625-FT-IS	Intrinsically Safe Field terminal, THC
8611-FT-FU	Field terminal, non-arcing, fused (Div 2)	8626-FT-IS	Intrinsically Safe Field terminal, RTD
8612-FT-NA	16-channel Field terminal, non-arcing	8632-FT-NI	32-channel Field terminal
8615-FT-4W	Field terminal, 4wire (current sinking)	8650-FT-PX	32-channel PX/Switch FTA for 8125/7
8616-FT-FU	PAC8000 Field terminal, fused		

I/O Carriers

Part Number	Description	Part Number	Description
8707-CA-08	8 module carrier	8718-CA-NS	BIM & Node Serices Carrier for Profibus & Modbus
8709-CA-08	I/O Carrier, 8 module with earth bar	8720-CA-04	4 module Intrinsically Safe carrier
8710-CA-04	4 module carrier	8723-CA-RB	Railbus isolator carrier
8711-CA-NS	Node services carrier, screw terminal LAN	8724-CA-PS	Intrinsically Safe module power supply carrier
8712-CA-NS	Node services carrier, Profibus-DP LAN	8725-CA-RB	Railbus isolator carrier with PFM
8715-CA-BI	BIM only carrier for Profibus & MODBUS LANs	8727-CA-08	8 module Intrinsically Safe carrier
8717-CA-PS	Carrier for 8910-PS-DC	8729-CA-08	Intrinsically Safe Carrier, 8 module, 64-address system