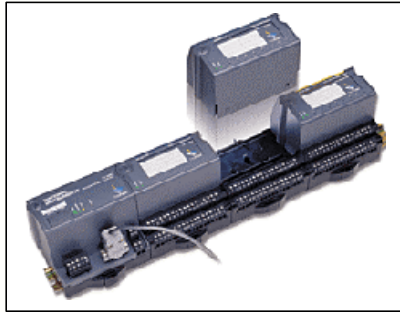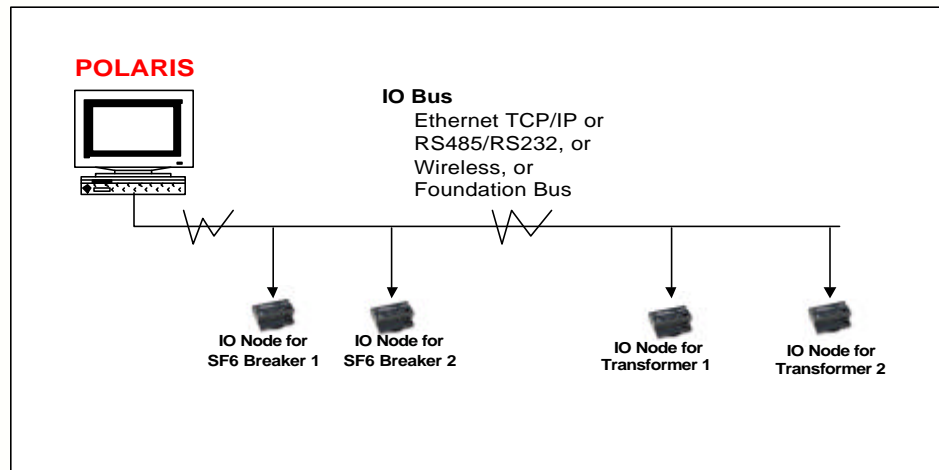# POLARIS^Ò IO Module

POLARIS IO system FieldPoint^{TM} is a modular distributed I/O system that provides economical solutions for industrial monitoring and control applications. The POLARIS IO system includes a variety of analog and digital I/O modules, terminal bases, network modules that connect I/O networks, and high-level software tools.

Networked, distributed I/O is now easier to use than ever. POLARIS IO system is a modular, economical I/O system that lets you easily locate I/O and measurement modules near the sensors and signal sources using Ethernet, RS-232, RS-485, or FOUNDATION Fieldbus. With industrial-grade performance, integrated software support, including an OPC server, and an unmatched set of usability features, POLARIS IO system delivers reliable, easy to configure and maintain distributed I/O solutions.

POLARIS

IO Bus
Ethernet TCP/IP or
RS485/RS232, or
Wireless, or
Foundation Bus

IO Node for
SF6 Breaker 1

IO Node for
SF6 Breaker 2

IO Node for
Transformer 1

IO Node for
Transformer 2

SPECIFICATION:

Control Power:	11-30 Vdc
Operating Temperature:	- 40 to 55 °C
Relative Humidity:	5 % tp 95%, noncondensing
EMC Immunity:	CE compliance EN50082-1 1994
EMC Emissions:	CE compliance EN55011 1991 Group 1 Class A at 10m
Dimension:	10.9 x 10.9 x 9.1 cm (4.3 x 4.3 x 3.6")
Isolations:	2500 Vrms optically isolated breakdown isolation
	250Vrms of operational isolation

IO MODULES:

IO Node CPU Module	Model FP-1600 with 10BaseT –RJ45
IO RTD Modules	8 RTDs FP-RTD-122: Pt 100ohm, Pt 1,000 ohm
IO TC Modules	8 Thermocouples FP-TC-120: J,K,T,E,R,S,N,B;mV
IO DI modules	8 Digital Inputs FP-DI-330 (5- 240 Vac/Vdc, TTL/CMOS)
IO DO module	8 Outputs FP-DO-400: 5-30 VDC
IO Enclosure & Terminals	Outdoor NEMA 4/IP56

SPLIT-CORE AND SOLID CT FOR POLARIS SIGNATURE ANALYSIS

Accuracy	1.0% FS
Response Time (10–90% step change)	100mS
Frequency Range	50–60Hz
Other Frequencies	Special calibration available for any frequency from 10–400Hz*
Power Supply	Self-powered
Loading	1m W minimum for rated accuracy 100K W add 1.3% error
Isolation Voltage	UL listed to 1,270VAC, tested to 5KV
Input Ranges	Field Selectable Ranges from 0–200A. Custom ranges available, consult factory.
Sensing Aperture	• FF Case: 0.55" (14mm) dia. • FT Case: 0.75" (19mm) dia. • SP Case: 0.85" (21.5mm) sq.
Case	UL 94V-0 flammability rated
Environmental	–4 to 122°F (–20 to 50°C), 0–95% RH, non-condensing
Listings	UL 508 Industrial Control Equipment (USA & Canada), CE

SP Case