

I/O Controller

Industrial I/O Controller for Ethernet I/O, RS485 I/O, or Modbus I/O



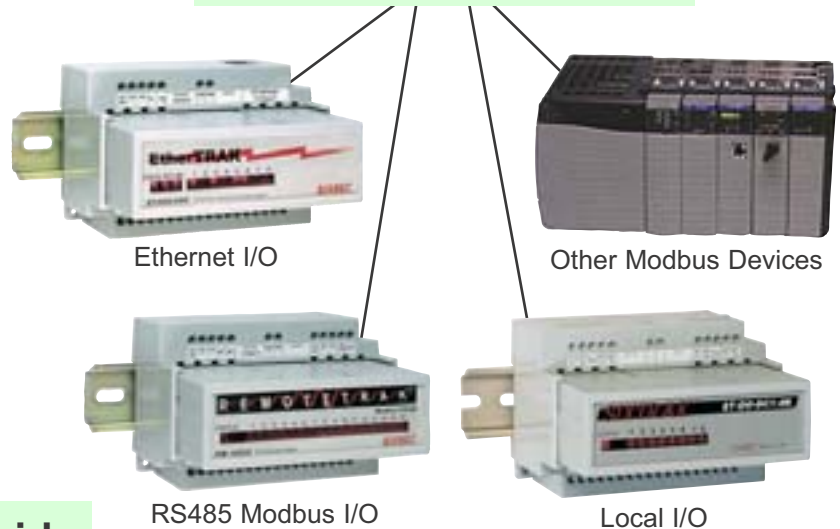
Industrial I/O Controller for SIXNET and Modbus Systems

The SixTRAK I/O Controller (ST-GT-1210) can run an ISaGRAF IEC 61131-3 program, perform datalogging, and interface to thousands of I/O, all in real-time. Select this unit when you need a reliable way to control or monitor Ethernet, RS485, or local I/O, and then connect to a supervisory computer. It is perfectly suited for most control and data acquisition applications where some PLC-style programming is required.

This one I/O controller replaces most of SIXNET's legacy programmable SixTRAK I/O gateways (part numbers ST-GT-xxx-##P).

- **Process Control, SCADA, and RTU functionality**
IEC 61131-3 programming with all five languages supported
Datalogging and peer-to-peer I/O transfers
- **Ethernet, RS232, RS485, and local I/O expansion**
Supports more than 40 SIXNET I/O module types
Interface to other vendor's Modbus I/O
- **Flexible communications**
Supports Open Modbus/TCP, ASCII, and RTU
Supports telephone, wireless and other links
- **Compact DIN-rail industrial package**
Zone 2, UL, CSA, CE, and DNV rated
-30 to +70°C operating temperature range

Control I/O from



SIXNET I/O controller selection guide

Product	Description	Maximum Memory	LINUX Enabled	ISaGRAF Programs	Data-logging	Total Ports	232 Ports	485 Ports	Ethernet Ports
ET-GT-ST-2	I/O Concentrator	128K	—	—	—	3	1	1	1
ST-GT-xxx-##P	Legacy I/O Gateway *	2M	—	1	Yes	2	1	1	1
ST-GT-1210	I/O Controller	512K & 16M	OEM Only	1	Yes	3	1	1	1
ST-IPM-####	Open Controller	2M & 16M+	Yes	4	Yes	3	1	1	1

* Note: The ST-GT-1210 replaces the legacy SixTRAK programmable I/O gateways (ST-GT-xxx-##P).

Performance Specifications

General	32-bit CPU
Memory for programming	16 Meg Flash and 16 Meg dynamic RAM
Memory for datalogging	512K battery-backed static RAM
I/O registers	Up to 50,000
Configuration & diagnostics	SIXNET I/O Tool Kit software
Datalogging support	Yes – SIXNET Sixlog
IEC 61131 programming	Yes – SIXNET ISaGRAF
SixTRAK I/O (ST-BUS) port	Up to 20 modules (640 I/O)
SixTRAK I/O specs.	See individual data sheets
ST-BUS specs.	See user manual for details
Ethernet port	10/100BaseTx auto-sensing
Connection	RJ45 (TD, RD, CTS, RTS, CD, DTR, DSR, GND)
Isolation	1200 VRMS 1 minute
Protocols	Modbus and SIXNET over TCP or UDP
Serial ports	Up to 115,200 baud
RS232 port	RJ45 (TD, RD, CTS, RTS, CD, DTR, DSR, GND)
RS485 port	Screws (485+, 485-, GND) 2-wire half-duplex
RS485 network	Up to 32 (full-load) stations
RS485 distance	Up to 0.5 miles (1 Km)
Flow control	Hardware, software, half/full-duplex modem
Protocols	Modbus RTU, Modbus ASCII, and SIXNET
Modes	Master, slave, and passthru
Environmental	DIN rail or flat panel mount
Power	10-30 VDC; 3 watts typ. (less modules)
Temperature	-30 to +70°C (-40 to +85°C storage)
Humidity	5% to 95% RH (non-condensing)
Electrical Safety	UL 508, CSA C22.2/14; EN61010-1; CE
EMI emissions	FCC part 15, ICES-003, Class A; EN55022; EN61326-1; CE
EMC immunity	EN61326-1 (EN61000-4-2,3,4,6); CE
Surge withstand	IEEE-472 (ANSI C37.90)
Vibration	IEC68-2-6
Hazardous locations (Class 1, Div 2, Groups A,B,C,D)	UL 1604, CSA C22.2/213, Cenelec EN50021 Zone 2
Marine & Offshore	DNV (Det Norske Veritas)

Specifications are subject to change. Consult factory for latest information.

Ordering Information

ST-GT-1210	SixTRAK I/O Controller
Note: Replaces legacy programmable SixTRAK Gateways (ST-GT-xxx-##P).	
Accessories	
Local I/O modules	See SixTRAK ordering guide
Ethernet I/O modules	See EtherTRAK ordering guide
RS485 I/O modules	See RemoteTRAK ordering guide
VT-MODEM-1WW	Industrial telephone modem for remote access
RM-PS-024-01F	Universal AC/DC to 24 VDC power supply
SXTOOLS-# *	SIXNET I/O Tool Kit software for configuration and diagnostics (Level 1 is free)
PAK#####-### *	Complete Packaged System – ready for installation
*Note: See separate SIXNET ordering guide for details.	

