

# SixTrak IPm®

Industrial RTU



## ▲ High-Performance Industrial RTU

THE SIXTRAK ST-IPM-8460 INDUSTRIAL RTU PROVIDES POWERFUL CONTROL FOR MANY AUTOMATION APPLICATIONS. WITH MANY SERIAL AND ETHERNET PORTS, THE ST-IPM-8460 RELIABLY CONTROLS PROCESSES IN HARSH ENVIRONMENTS.



No matter what the application, the ST-IPm-8460 can be easily configured to meet your needs. Dual power inputs and support for redundant Ethernet networks help increase uptime while a multitude of communication ports and supported protocols enable connectivity to a variety of field devices.

In addition to featuring an open source Linux programming platform, users can customize applications using IEC 61131-3 languages including structured text, ladder diagram, function block diagram, instruction list and sequential function chart. Advanced debugging and workbench features include version control, XML project item import, project creation/validation scripting, template creation, project visualization and extended protocol support, all designed to easily support large, complex projects across multiple devices.



## APPLICATIONS

- ▲ Energy
- ▲ Oil & Gas
- ▲ Processing Plants
- ▲ SCADA
- ▲ Utilities
- ▲ Water/Wastewater

## PRODUCT HIGHLIGHTS

- ▲ Dual Ethernet Network Support
- ▲ Built-in Data Logging
- ▲ Local Monitoring with Built-in I/O
- ▲ Multiple Serial Ports for Application Versatility
- ▲ Wide Operating Temperature for Harsh, Remote Locations
- ▲ Native Support for Industrial Protocols, Including Ethernet TCP/IP, Modbus TCP/UDP and Sixnet UDR

## FEATURES & BENEFITS

### HIGHLY CONFIGURABLE

- ▲ Robust IEC 61131 Development Environment
- ▲ Open Linux Programming Platform
- ▲ Develop Application-specific Communication Drivers
- ▲ Choose from a Full Suite of I/O Modules to Adapt to Application Needs

### DESIGNED TO OPTIMIZE UPTIME

- ▲ Redundant Network and Controller Support
- ▲ Dual 10 to 30 VDC Power Inputs
- ▲ Peer to Peer Linking

### RUGGED AND RELIABLE

- ▲ -40 to 70 °C Operating Temperature
- ▲ UL Class I, Div. 2
- ▲ ATEX Certification

# ▲ SixTRAK IPm Industrial RTU Specifications

## PERFORMANCE SPECIFICATIONS

Processor: Industrial PPC (32-bit)  
Dynamic Memory (RAM): 512 MB (478 MB available)  
Program Memory (Flash): 512 MB (272 MB for application data and programs)  
Data Logging Memory (RAM): 8 MB (battery backed)

## SWITCH PROPERTIES

Operation: Unmanaged  
Number of MAC Addresses: 2  
IEEE Compliance: 802.3u, 802.3x  
Protocols: TCP/IP, IGMP, DHCP, Modbus UDP/TCP  
See the website for a complete list of protocols available.  
Latency (typical): 10 Mbps: 16  $\mu$ s, 100 Mbps: 5  $\mu$ s  
Switching Method: Store-and-Forward  
Maximum Throughput: 90 Mbps (Network 2)  
MDIX Auto Sensing Cable  
Auto Sensing Speed and Flow Control  
MTBF: >820,000 hours per MIL-HNDBK-217F2

## POWER INPUT

Input Voltage: 10 to 30 VDC  
Steady Input Current: 150 mA @ 24 V (6.2 W max.)  
Inrush: 3.0 A / 60  $\mu$ s @ 24 VDC  
BTU/HR: 12.29

## COMMUNICATION PROPERTIES

Ethernet Ports  
Independent Networks with Unique MAC & IP Addresses  
Network 1 Port: One (1) shielded 10/100Base-T(X) port (full duplex)  
Network 2 Ports: Five (5) shielded 10/100Base-T(X) ports  
Serial Ports  
Supports speeds up to 115,200 baud  
RS-232 (Port A): RJ45 (TD, RD, CTS, RTS, CD, DTR, DSR, GND)  
RS-232 (Port B): RJ45 (TD, RD, CTS, RTS, CD, DTR, DSR, GND)  
RS-485 (Port C): Screw block (485+, 485-, GND) 2-wire half-duplex, isolated 1,500 Vrms  
RS-232 (Port D): Screw block (TD, RD, RTS, CTS, GND) isolated 1,500 Vrms

## RECOMMENDED WIRING CLEARANCE

Front: 3" (7.62 cm)  
Top: 2.5" (6.35 cm)

## NETWORK MEDIA

10BaseT:  $\geq$ Cat3 cable  
100BaseTX:  $\geq$ Cat5 cable

## CERTIFICATION & COMPLIANCES

Hazardous Locations: ISA12.12.01, CSA C22.2/213, Class 1, Division 2 Groups A, B, C, D  
ATEX: IEC 60079-0, IEC 60079-7, Zone 2  
Marine/Offshore: Rated per ABS  
Electrical Safety: UL 508, CSA C22.2/142, EN/IEC61010-1, CE  
EMI Emissions: FCC part 15, ICES-003, Class A, EN61000-6-4, CE  
EMC Immunity: EN61000-6-2, CE IEC61000-4-9, IEC61000-4-10, IEC61000-4-16  
Flammability: UL 94V-0 materials

## ENVIRONMENTAL

Operating Temperature Range: -40 to 70 °C  
Storage Temperature Range: -40 to 85 °C  
Operating and Storage Humidity: 10% to 95% (non-condensing)  
Operating Altitude: Up to 2000 ft  
Shock: IEC60068-2-6; Half Sine, 31 G, 11 msec duration; IEC 60870-2-2 Class Cm  
Vibration: IEC60068-2-27; 9-200 Hz 2 G, 200-500 Hz 1.5 G; IEC 60870-2-2

## MOUNTING

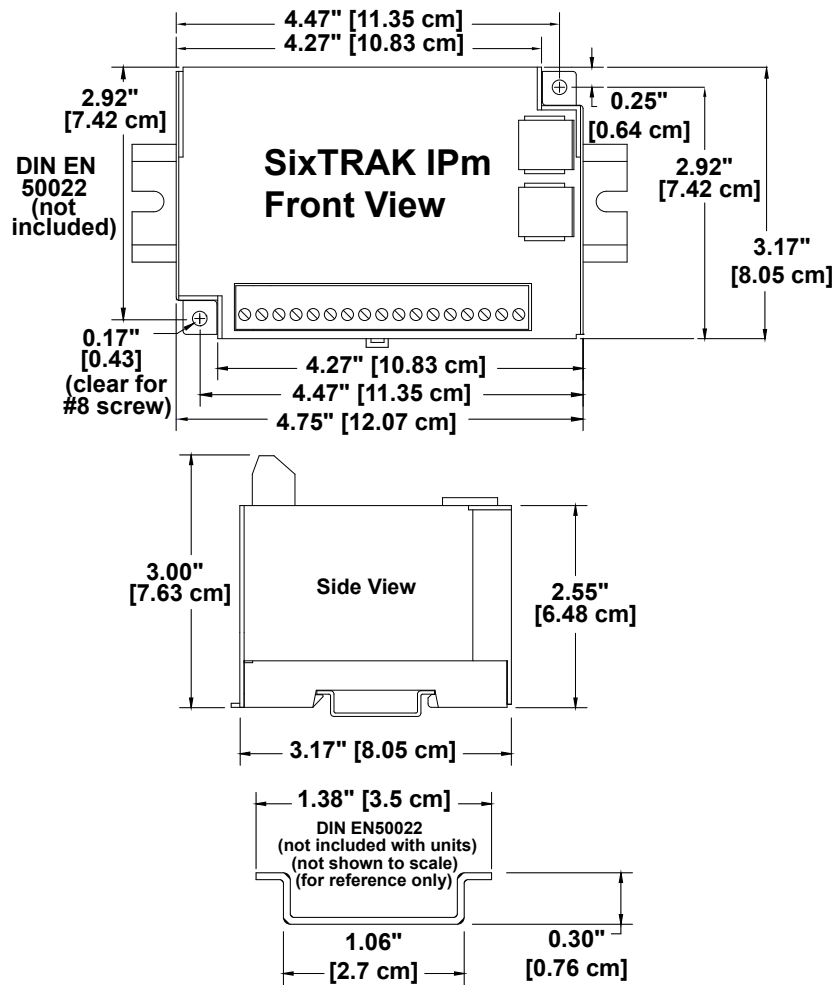
Case Dimensions:  
Height: 3.17" (8.05 cm)  
Width: 4.75" (12.07 cm)  
Depth: 3.00" (7.62 cm)  
Weight: 0.75 lbs (0.34 kg)  
Mount: DIN rail 35 mm or flat panel mount

## WARRANTY

2 years on design and manufacturing defects.  
Specifications are subject to change.  
Visit [www.redlion.net](http://www.redlion.net) for more information.

## ▲ SixTRAK IPm Industrial RTU Dimensions

### DIMENSIONS In inches (cm)



# ▲ SixTRAK IPm Industrial RTU Ordering Guide

## MAIN UNIT

PART NUMBER	DESCRIPTION
ST-IPM-8460	SixTRAK IPm Industrial RTU

## ACCESSORIES

PART NUMBER	DESCRIPTION
E2-MIX20884-D	EtherTRAK-2 I/O Module-32 Mixed Inputs/Outputs
E2-MIX24880-D	EtherTRAK-2 I/O Module-32 Mixed Inputs/Outputs
E2-MIX24882-D	EtherTRAK-2 I/O Module-34 Mixed Inputs/Outputs
E2-32DI24-D	EtherTRAK-2 I/O Module-32 24V Digital Inputs
E2-16DI24-D	EtherTRAK-2 I/O Module-16 24V Digital Inputs
E2-16DIAC-D	EtherTRAK-2 I/O Module-16 120VAC Digital Inputs
E2-32DO24-D	EtherTRAK-2 I/O Module-32 24V Digital Outputs
E2-16DO24-D	EtherTRAK-2 I/O Module-16 24V Digital Outputs
E2-16DORLY-D	EtherTRAK-2 I/O Module-16 Digital Output Relays
E2-16ISO20M-D	EtherTRAK-2 I/O Module-16 4-20mA Isolated Analog Inputs
E2-32AI20M-D	EtherTRAK-2 I/O Module-32 20mA Analog Inputs
E2-32AI10V-D	EtherTRAK-2 I/O Module-32 10VDC Analog Inputs
E2-16AI20M-D	EtherTRAK-2 I/O Module-16 Analog Inputs (4-20mA)
E2-16AI-8AO-D	EtherTRAK-2 I/O Module-16 Analog Inputs/8 Analog Outputs
E2-8AO20M-D	EtherTRAK-2 I/O Module-8 Analog Outputs
E2-16ISOTC-D	EtherTRAK-2 I/O Module-16 Isolated Thermocouple Inputs
E2-10RTD-D	EtherTRAK-2 I/O Module-10 RTD Inputs



Red Lion has been delivering innovative solutions to global markets since 1972 through communication, monitoring and control for industrial automation and networking - enabling companies worldwide to gain real-time data visibility that drives productivity. Red Lion is part of Spectris plc, the productivity enhancing instrumentation and controls company.

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