PLUS
Location Systems

8-Port Synchronization Distribution Panel
Model Number 5032

User Manual

Contents

Safety Information 3
Overview 4
Specifications 5
Mounting 6
Standalone SDP Installation 7
Standalone SDP Installation, Continued 8
Multiple SDP Installation 9
Multiple SDP Installation, Continued 10
Regulatory & Legal Information 11

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Safety Information

Read and follow all instructions before using the SDP.

- Only plug the SDP into approved power outlets.
- Unplug the SDP before removing cover.
- Unplug the power cord when changing fuses.
- Do not use the SDP with a damaged cord.
- Do not use SDP near water.
- Do not use the SDP near heat sources.
- Do not install in environments that exceed temperature and humidity requirements.
- Do not cover the ventilation ports on the SDP.
- Do not use the SDP if it has been dropped.
- Only connect PLUS sensors to the sensor ports.
- Attach the rubber feet to the device.

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Overview

The PLUS Location 8-Port SDP (Synchronization Distribution Panel) provides power, timing synchronization, and Ethernet connectivity to a network of PLUS sensors.

The SDP includes eight sensor ports. Each sensor port can provide power for up to three sensors, 24 sensors total. Each senor port can also provide timing synchronization for up to six sensors, 48 sensors total.

Each of the SDP's sensor ports connect to the network port, allowing sensors linked to the SDP to transmit information to a computer. The network connection also enables the 8-Port SDP to match the timing signal of a primary SDP, so all SDPs are synchronized.

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Specifications

Dimensions (HxWxD)	**With rubber feet:** 2.16 x 8.62 x 16.0 inches (43.8 x 219 x 406.4 millimeters) **Without rubber feet:** 1.72 x 8.62 x 16.0 inches (43.8 x 219 x 406.4 millimeters)
Weight	4.1 pounds (1.86 kg)
Mounting	19-inch rack mount, table top, or wall/column mount
Power Supply	**Input:** 100 – 240 VAC, 50/60 Hz **Line Harmonic Emissions:** Meets EN61000-3-2, Class A, B, C, D **Safety:** Thermal and power overload protection
Input Power	9W (no sensor load) 140W (24 sensor load)
AC Power Connection	IEC C14 power receptacle (mating power cord should have IEC 320-C13 plug with approved regional connector at other end of cord)
Fuse	250V IEC Slow 5X20mm 4A; Littelfuse 0218004.HXP or Equivalent
Temperature	**Operating:** -20°C to +50°C **Storage:** -40°C to +60°C
Relative Humidity	Up to 95% non-condensing
I/O Ports	8 sensor ports; 1 network/sync regeneration port; all 10/100 BaseTx Ethernet compatible
Sensor Port Capacity	Up to 3 sensors per port (24 total) powered by SDP; maximum of 6 sensors per port (48 total) with auxiliary power
Max Cable Length	100 meters maximum from SDP to last sensor in chain
Certifications	cTUVus certification per ○ CAN/CSA C22.2.60950-1: 2011 ○ UL 60950-1: 2011 (2nd Ed.) CB Scheme per IEC 60950-1:2005 +A1:2009 LVD Compliance per EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + AC:2012 FCC Part 15 (Class A) RoHS
Warranty	1 year
Part Number	5032

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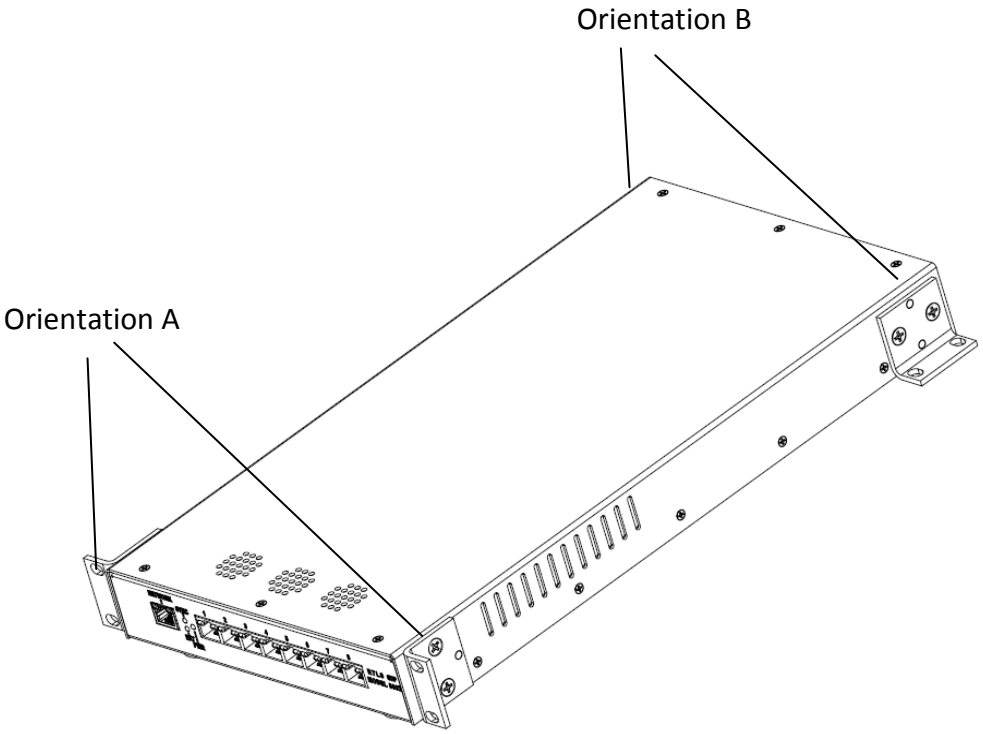
Mounting



Rack Mount the SDP

For rack mounting, use two brackets in orientation A with an adapter.

Wall Mount the SDP

For wall mounting, use all four brackets in orientation B.

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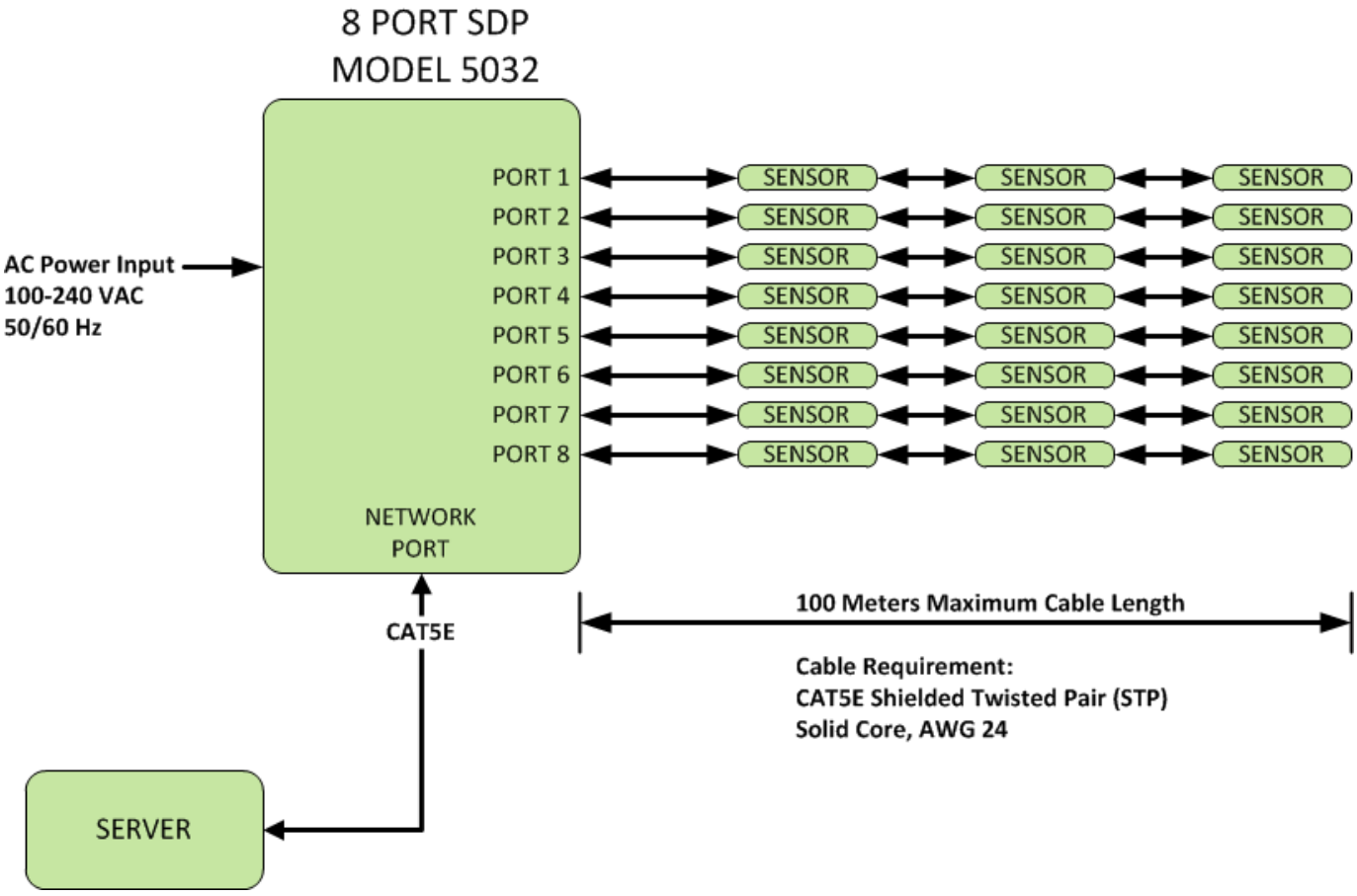
Standalone SDP Installation



The diagram above shows a typical standalone installation of an 8-Port SDP with a full load of sensors.

Installation

Connect sensors and the server to the SDP as shown in the diagram. Connections between the SDP and a sensor, or between any two sensors, must use CAT5E Shielded Twisted Pair (STP) 24 AWG cable.

Compatible sensor models

- 1000RL1
- 3002RNC
- 4001RNC
- 102RK01

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Standalone SDP Installation, Continued

Maximum Cable Length

The maximum cable length for each sensor port to the farthest sensor in the chain in 100 meters. Likewise, the maximum distance from the SDP to a networked computer is 100 meters.

Powering on the SDP

Connect the SDP to power outlet and turn on power switch on the rear panel. The PWR and SYNC LEDs will light up green. The EXT LED should be off.

LEDs

If the SYNC LED does not turn back to green after 10 seconds, then either one of the SDP units has a defect or the interconnect cable is defective.

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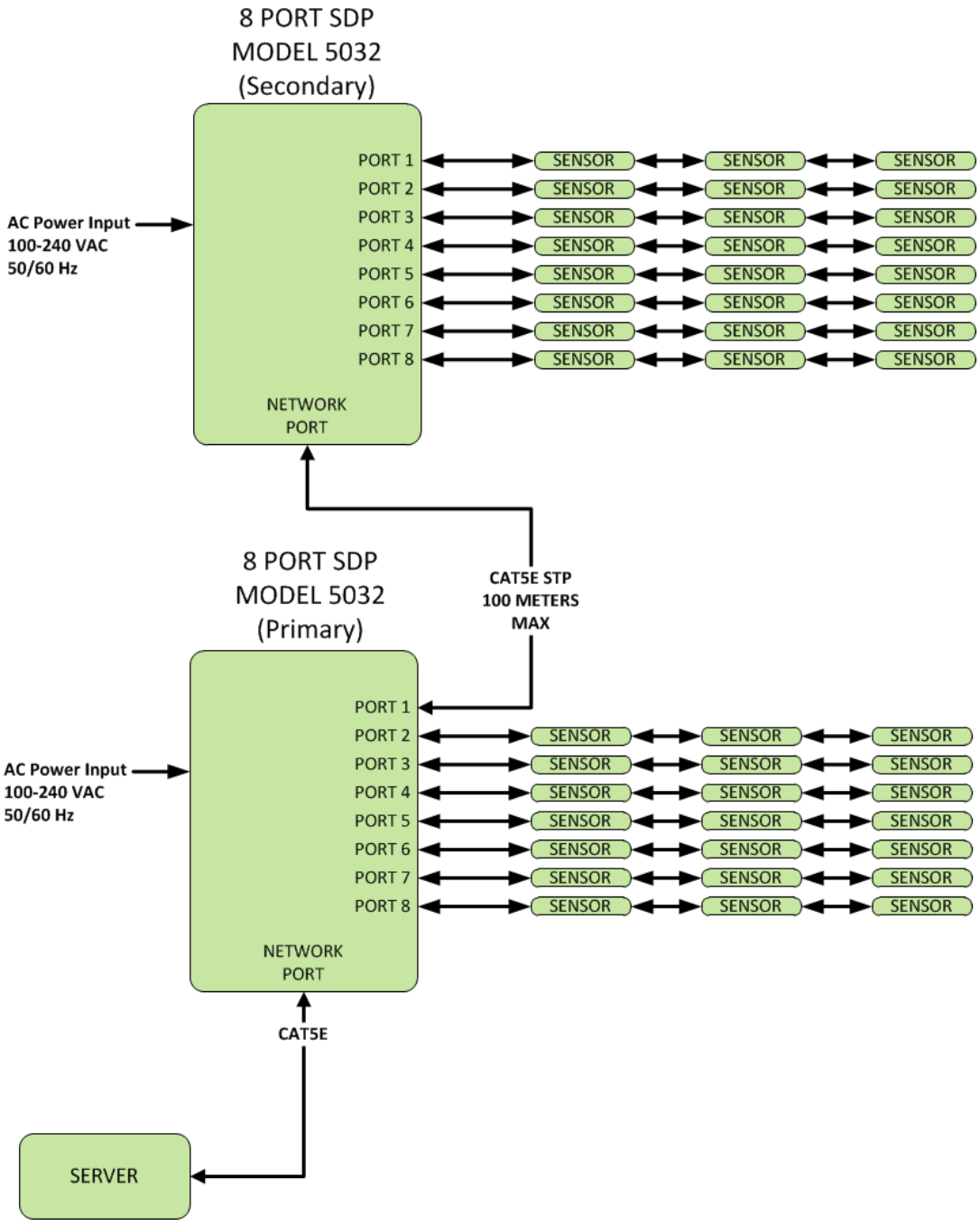
Multiple SDP Installation



The diagram above shows primary and secondary SDPs installed with sensors.

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Multiple SDP Installation, Continued

Installation

Connect sensors and the server to the SDP as shown in the diagram. However, one port on the primary SDP must be connected to the NETWORK port on the secondary SDP.

Power each SDP. After at least 10 seconds, check LEDs on the secondary SDP:

- EXT light should be green
- SYNC light should be green

If the LEDs are not on, solid green, check for cable faults (including excessive cable length).

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Regulatory & Legal Information

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Trademarks & Patents	PLUS and the PLUS logo are trademarks of PLUS ® Location Services. Other trademarks and trade names used in this manual are the property of the manufacturers or vendors of the respective products.
Intended Use	This manual examines the installation and uses of the PLUS 8-Port Synchronization Distribution Panel. Use this product only for the purpose it was designed for; refer to the data sheet and user documentation for details.
FCC Compliance	This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.
Regulatory Information	CE
Manufacturer	© PLUS ® Location Services **HQ and regulatory responsibility:** 6767 Old Madison Pike NW, Suite 310 Huntsville, AL 35806 **EU authorized manufacturing representative:** Level 13, 56 Berry St., North Sydney, NSW AUSTRALIA, 2060
European Union Directives	**2002/96/EC (WEEE directive):** Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: www.recycle this.info.
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