

**sensorProbe2+ (SP2+ / 4PUN / SP2+E)**

# Cost Effective and Versatile Monitoring



SP2+ comes equipped with 4x intelligent sensor ports to connect a wide range of AKCP sensors. 2x sensor ports are enabled under software. Pay for 2 sensor ports now, and upgrade in field later if more sensor ports are needed.

If you need 4 ports right away the 4PUN is a software license that unlocks all 4 ports.

All sensorProbe2+ series devices come with SNMPV3 support. Additional security features can be unlocked such as support for IPV6 and Radius.

Options include an internal 4G cellular data modem with optional GPS antenna. If you have Modbus devices that you wish to monitor, such as a generator, or other industrial equipment, the SP2+ can be ordered with an RS485 port option (SP2+E).

## **OPTIONS:**

**PoE** - Power over Ethernet

**EXP** - Port that is compatible with CCU, E-Opto16 and E-Sensor8 expansion units as well as doubling as a Modbus RS485 port.

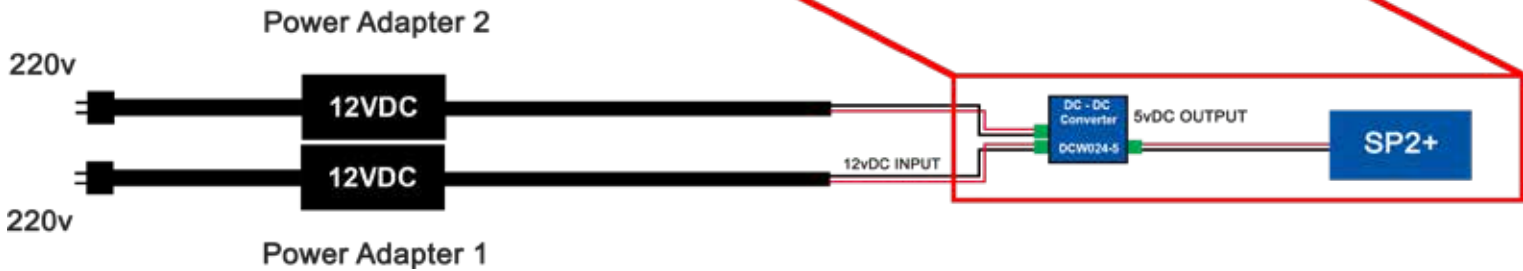
**4G Modem** - Cellular data communications, SMS alerts and phone call notifications.

## SP2+ - Dual Power Input

SP2+ can be powered via dual AC or DC inputs, providing redundancy for powering the device. The 12-24VDC or 48-60VDC external power supplies feature dual DC inputs with a single 5VDC output for powering the SP2+.

Ideal for telecoms applications where DC power comes straight into the cabinets. Or in a data center with dual PDU's. Utilize 2x 12VDC power adapters, one on each AC power source, connect them to the DCW024-5 with the output to the DC jack on the SP2+.

If you have the SP2+ with Power over Ethernet (PoE), this can function as a redundant power source. Should the mainline power fail the SP2+ will switch to using the PoE as an alternative power source to the DC jack input.



# SP2+ / 4PUN / SP2+E Technical Specification

<b>Dimension</b>	Size 4.5" x 2.5" x 1.25" Weight 0.3 Kg
<b>Network Interface</b>	Standard 10/100 Mbps Full Duplex Ethernet RJ-45 Port
<b>Mounting</b>	0U rack-mountable Compatible with AKCP's DIN Rail Clips
<b>Power Requirements</b>	External 5.5V 3A Power Adapter Input Voltage and Current ratings : 100V~240V - 0.22A Optional PoE IEEE 802.3af support
<b>Status Indication</b>	LED indication for Power LED for network connectivity LED for sensor online and threshold status Internal Buzzer alarm
<b>RJ-45</b>	4 RJ-45 Sensor Ports for connecting AKCP Autosense Sensors Up to 20 Dry Contact Input and Output (0VDC/5VDC) Input Optional RJ-45 Expansion / Modbus RS485 Port
<b>Components</b>	Manufactured using highly integrated, low power surface mount technology to ensure long term reliability.
<b>Operating Environment</b>	Temperature : Min. -35° C – Max.80° C Humidity: Min. 20% – Max. 80% (Non-Condensing)
<b>MTBF</b>	1,400,000 Hours based on field experience with sensorProbe units.
<b>Inputs</b>	4x RJ-45 Sensor Ports (SP2+) 2x RJ-45 Sensor Ports with 2x additional locked under software (SP2-V2) 1x 10/100 Ethernet Port Optional 3/4G integrated cellular modem with external antenna (Optional GPS feature) 1 sensor port can be used as expansion port or Modbus RS485 on SP2+E version (supports up to 4 CCU, E-Sensor8 or E-Opto16) * Includes 5 free virtual sensors
<b>Outputs</b>	Configurable output signals (0VDC/5VDC) on any of the 4 RJ-45 sensor ports
<b>Max Sensors</b>	Maximum of 150 onlined sensors, including Expansion Units and virtual sensors.
<b>Optional Expansion Capabilities</b>	See above * 1 sensor port can be used as expansion port or Modbus RS485 (on SP2+E version)
<b>Maximum Number of Access Control Users</b>	500 Users 100 Users default
<b>Supported Protocols</b>	Rsyslog MQTT / MQTTS SNMP V1/2 IPV6 RADIUS TACACS HTTPS Encrypted E-mail
<b>Licensing</b>	
<b>5 Dry Contact : DC5</b>	5 dry contact input sensor (per port) 1 License equals 1 RJ45 port unlocked
<b>Virtual Private Network (VPN) : VP</b>	VPN - Connect to AKCPro Server from your base unit through VPN over Ethernet or cellular network.
<b>Virtual Sensor pack : VS</b>	Virtual sensor (pack of 5 sensors). Maximum of 80 virtual sensors. * ** Every SP2+ comes with 5 free virtual sensors
<b>3rd Party PMS &amp; Modbus : PM</b>	3rd Party Modbus / PMS device. Up to 4 modbus devices with 15 sensors.* **
<b>500 Access Control user database : UA</b>	500 users for access control (SP+ series has 100 users as standard)
<b>IPV6 : SP-IPV6</b>	Support for IPV6 network addresses
<b>Radius : RAD</b>	Radius user authentication server connection. TACACS authentication to Radius.
<b>Important Notes</b>	* the sensorProbe+ units can only have 60 Modbus RS485 sensors (virtual sensor + modbus devices) ** the sensorProbe+ units can only have 60 Modbus TCP/IP sensors (virtual sensor + modbus devices)

## SP2+ / SP2+E Technical Drawing

### SP2+ with Internal Modem

