Cost Effective and Versatile Monitoring

SP2+B comes equipped with 4x intelligent sensor ports to connect a wide range of AKCP sensors. 2x sensor ports are enabled by default, with a further 2 being unlocked with the one time Pro license upgrade. PoE is included as standard.

Additional security features can be unlocked such as support for IPV6 and Radius, SNMPV3 also with the Pro license upgrade.

Options include an internal 4G cellular data modem. 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:

- **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.

- **External PSU** - Power the unit with external AC power supply, or use as a redundant power source with PoE

SP2+B - Basic and Professonal

The below table shows the features included with the SP2+ Basic, and the benefits of upgrading to the Professional license.

SP2+

	SP2+B	SP2+PRO
Dry Contact	—	—
Virtual Sensors	—	5
Event Log	✓	✓
Notifications	✓	✓
MQTTS	✓	✓
Graphs	✓	✓
Maps	—	✓
3rd Party Modbus	—	✓
IPv6	—	✓
SNMPV3	—	✓
VPN	—	✓
Access Control User	—	✓
RADIUS	—	✓
Heartbeats	—	✓
Modbus	—	✓
Cloud	—	✓
Authentication	—	✓

sensorProbe2+

SP2+B - 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.

5vDC OutPut

12vDC InPut

DC-DC-Coverter
DCW024-5

SP2+

Power Adapter 2

220v

12VDC

12vDC INPUT

DC-DC Converter

5vDC OUTPUT

SP2+

12VDC

DCW024-5

220v

Power Adapter 1
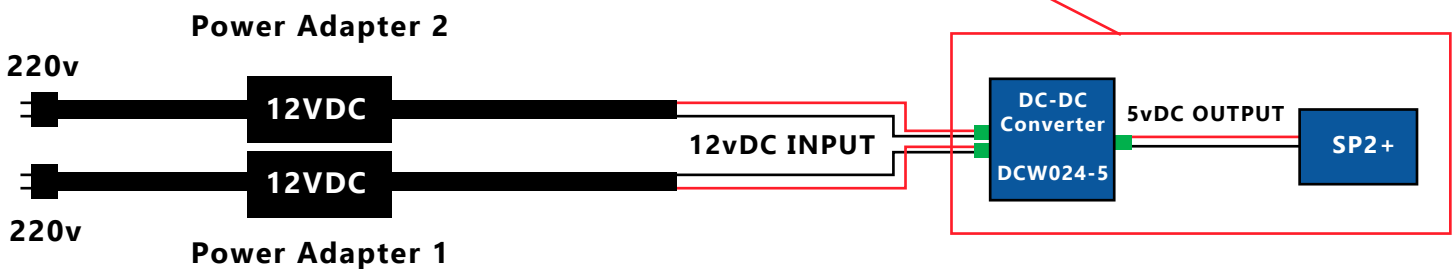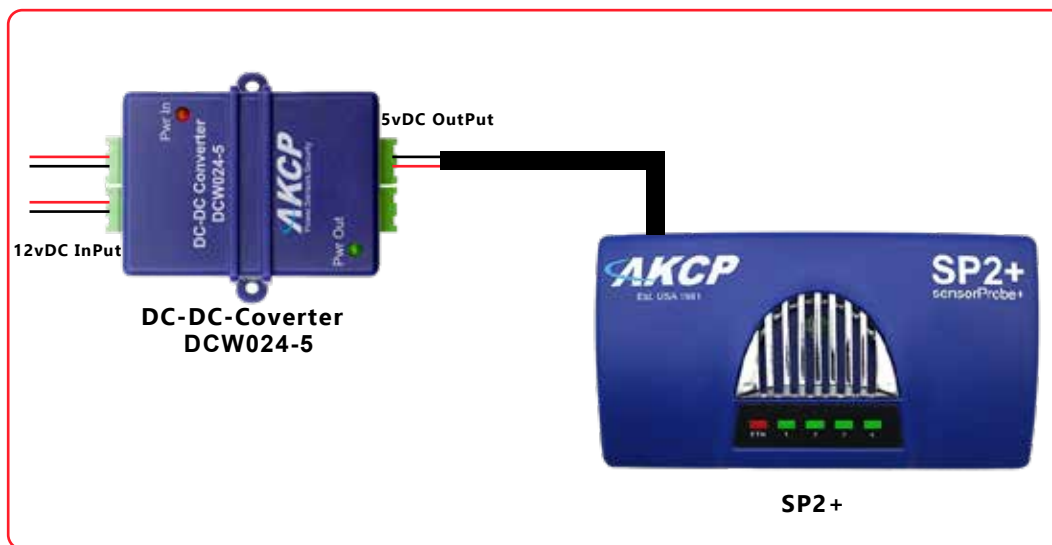
Example of dual power source for the SP2+

Dimension	Size 4.5" x 2.5" x 1.25" Weight 0.3 Kg
Network Interface	Standard 10/100 Mbps Full Duplex Ethernet RJ-45 Port
Mounting	0U rack-mountable Compatible with AKCP's DIN Rail Clips
Power Requirements	External 5.5V 3A Power Adapter Input Voltage and Current ratings : 100V~240V - 0.22A Optional PoE IEEE 802.3af support
Status Indication	LED indication for Power LED for network connectivity LED for sensor online and threshold status Internal Buzzer alarm
RJ-45	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
Components	Manufactured using highly integrated, low power surface mount technology to ensure long term reliability.
Operating Environment	Temperature : Min. 0°C - Max. 70°C (Industrial Option available for Min. -25°C - Max. 70°C) Humidity: Min. 20% – Max. 80% (Non-Condensing)
MTBF	1,400,000 Hours based on field experience with sensorProbe units.
Inputs	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) *
Outputs	Configurable output signals (0VDC/5VDC) on any of the 4 RJ-45 sensor ports
Max Sensors	Maximum of 400 onlined sensors, including Expansion Units and virtual sensors.
Optional Expansion Capabilities	See above * 1 sensor port can be used as expansion port or Modbus RS485 (on SP2+E version)
Maximum Number of Access Control Users	500 Users 100 Users default
Protocols *Requires Pro License **Requires Additional License	Rsyslog* MQTT / MQTTS* SNMP V1/2 /3 IPV6* RADIUS** TACACS** HTTPS Encrypted E-mail
Pro License Features	
5 Dry Contact: DC5	5 dry contact input sensor (per port) 1 License equals 1 RJ45 port unlocked
Virtual Private Network (VPN)	VPN - Connect to AKCPro Server from your base unit through VPN over Ethernet or cellular network.
Virtual Sensor pack: VS	Virtual sensor (pack of 5 sensors). Maximum of 80 virtual sensors. * ** Comes with 5 free virtual sensors 3rd Party Modbus / PMS device.
3rd Party PMS & Modbus	Up to 4 modbus devices with 15 sensors.* ** 500 users for access control (SP+ series has 100 users as standard)
500 Access Control user database : UA	Support for IPV6 network addresses
IPV6: SP-IPV6	Radius user authentication server connection. TACACS authentication to Radius. Requires license.
Radius: RAD	* the sensorProbe+ units can only have 60 Modbus RS485 sensors (virtual sensor + modbus devices)
Important Notes	** the sensorProbe+ units can only have 60 Modbus TCP/IP sensors (virtual sensor + modbus devices)

sensorProbe2+

SP2+B with Internal Modem

Top view:
67.90mm · 63.90mm · 120.35mm

Front view:
40.20mm

Side view (Ethernet):
Reset · Ethernet

Rear view:
4 · 3 · 2 · 1 · 5VDC · GNW Antenna

Side view (SIM card):
SIMCARD · 63.90mm · 67.90mm

Bottom view:
16.90mm · 67.90mm · 63.90mm · 44.52mm · 120.35mm

sensorProbe2+