



## Key Features

- Small, lightweight, 35 mm DIN rail mountable enclosure with UL94 V0 flame retardant rating
- Low power: 1 - 2 W (netSP), 2 - 3 W (netSP+)
- Management of up to 4 netADC's per netSP/netSP+
- Decimation of netADC data for improved dynamic range
- Continuous, STA/LTA, Adaptive Spectral Triggering (AST)<sup>1</sup> or Threshold triggering algorithms
- Intelligent Data Prioritisation: dynamically adjusts data throughput to the available communications bandwidth (associated triggers are favoured, followed by triggered and then un-triggered waveforms)
- Multi-station Networked, or Standalone operating modes
- Communications: 10/100Base-TX Ethernet, TCP/IP, Waveforms over Ethernet (WoE), DSL, WiFi Radio, Fibre, Serial or Cellular modem (GSM,3G, etc.)
- Built-in IMS WoE switch distributes timing to downstream devices over same CAT5 cable as used for data (saves cabling)
- Internal data storage: 4 MB (netSP), up to 32 GB (netSP+)
- External storage to USB device<sup>2</sup> (e.g. memory stick, external hard drive, etc.), with optional data compression
- General purpose, non-seismic I/O: 6 individually configurable channels (digital input, digital output or ADC input)
- Web interface for device status monitoring, configuration and control
- Remotely upgradable firmware via Synapse or Web interface
- On-board temperature measurement and readout

## Specifications

### ELECTRICAL:

Supply voltage .....	9 - 18 V DC
Power consumption <sup>3</sup> .....	1 - 3 W

### MEMORY:

netSP.....	128 MB
netSP+.....	256 MB

### CPU:

Speed (netSP).....	179 MHz
Speed (netSP+).....	800 MHz
Architecture (netSP).....	ARM
Architecture (netSP+).....	x86

### PHYSICAL:

Mass (netSP).....	550g
Mass (netSP+).....	650g
Dimensions:	
Height.....	180 mm
Width.....	52 mm
Depth.....	165 mm

### ENVIRONMENT:<sup>4</sup>

Operating Temperature <sup>5</sup> .....	0-70°C
Humidity .....	20 - 80% relative humidity, non-condensing

## EXTERNAL INTERFACES

- 4 Ethernet switch ports (10/100Base-TX) with Auto-MDIX (auto-crossover) functionality for setup and telemetry
- USB 2.0: full-speed (netSP), high-speed (netSP+)
- RS-232 (3-wire) port for monitoring and distribution of time synchronisation signal (ATU/PPS)
- RS-232 (3-wire) console port
- RS-485 port for general purpose use
- RS-232 (7-wire) port for external serial modem or GPS time-synchronisation via NTP
- 7 individually configurable, non-seismic I/O channels (digital input, digital output or 10-bit ADC input)
- DC power and feed-through
- 6 user LEDs
- 4 user push buttons

### NOTES:

- <sup>1</sup> Adaptive Spectral Triggering only available on netSP+.
- <sup>2</sup> Type and size of external storage is application specific. For typical applications IMS recommends high quality USB flash drives with capacity no larger than 8 GB. Contact IMS for further information.
- <sup>3</sup> 1 - 2 W (netSP), 2 - 3 W (netSP+). Power consumption is an average measurement, and depends on specific configuration. For power sensitive applications, IMS can customise device configuration for even lower power consumption. Contact IMS for further information.
- <sup>4</sup> This device is designed to be operated in an enclosed environment. To avoid voiding of equipment warranty, the equipment must be housed in an external enclosure. The external enclosure should have an Ingress Protection Rating of at least IP65. Suitable, customised, pre-wired enclosures are available from IMS upon request.
- <sup>5</sup> Guaranteed minimum operating temperature range. Individual units may have wider ranges, depending on manufacturing batch. For operating temperature ranges up to -40 - 80°C, please contact IMS directly before placing an order as prices and lead-times may vary.

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