

### **Outpost WASP**

#### **Wireless Endpoint Specifications**

The Outpost WASP endpoint is a revolutionary low cost monitoring solution. With no power supply or data cables required you can connect the device to any compatible meter or sensor in mobile phone coverage. Meter/sensor readings are automatically transmitted to your web site or directly to your billing system. Internal batteries will last up to 10 years.

- \* Environmental & Agricultural Monitoring
- \* Advanced Metering Infrastructure
- \* Smart Energy Monitoring
- Step 1 Connect to compatible meter or sensor
- **Step 2** Swipe magnet to activate your Outpost
- Step 3 You're done! View data from your website



Outpost WASP Series logger. Smart phones can be used to assist installations.



#### Lithium Batteries

Long life batteries designed to power the Wasp for many years



Completely waterproof device. Save money on extra enclosures.



Install the device anywhere with GSM mobile phone coverage

WASP	-aG	-bcccdM	-EA
Outpost Family	a = Telecommunications	b = 1 or 2 Inputs of type ccc (optional: cable length d meters)	Antenna
WASP = revolutionary monitoring end point	a = 3 = 3G = HSPDA (Tri-band)	ccc = ENV = M12 conn with 1 x pulse & 1 x 4-20mA input, 30cm ccc = TMP = NTC thermistor temperature channel (d=1,6) ccc = SDI12 = M12 conn with SDI12 interface, 30cm	EA = external antenna (SMA)













#### **Technical Specifications**

Analog	Inputs	(-ENV	option)
--------	--------	-------	---------

<ul><li>Channels</li></ul>	max 2 (order code)
<ul><li>Accuracy</li></ul>	0.1%
<ul><li>Electrical</li></ul>	0-20mA, single ended
■ Switched Power Output (SPO) Max	50mA

#### Pulse/Counter (-ENV option)

<ul><li>Channels</li></ul>	max 2 (order code)
Open-circuit voltage	2.8V
Close circuit voltage threshold	1.2V
<ul> <li>Input Impedance</li> </ul>	1MOhm
<ul> <li>Minimum Pulse Width</li> </ul>	20ms
Maximum Frequency	25 Hz

#### Datalogger

<ul><li>Flash Memory</li></ul>		300K	
•	Channel Sampling Rate	max 1 min per channel	

#### Telecoms (-2G or -3G option)

<ul> <li>2G / GPRS Frequencies</li> </ul>	900/1800/850/1900Mhz
<ul> <li>3G / HSDPA Frequencies</li> </ul>	850/900/1900/2100 Mhz
<ul> <li>Antenna Connector</li> </ul>	SMA

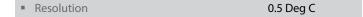
#### Physical

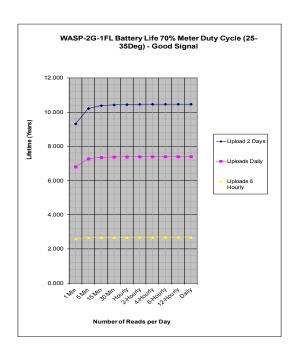
<ul><li>Size</li></ul>	110mm x55mm x40mm
<ul><li>Weight</li></ul>	255g (9 oz)
<ul><li>Temperature</li></ul>	-5 Deg C to 60 Deg C

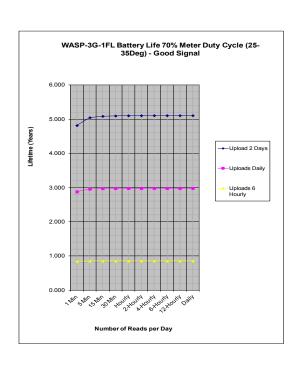
#### SDI-12 Connector (-SDI12 option)

٠	Switched Power Output (SPO) Max	50mA
---	---------------------------------	------

#### Temperature Probe (-TMP option)

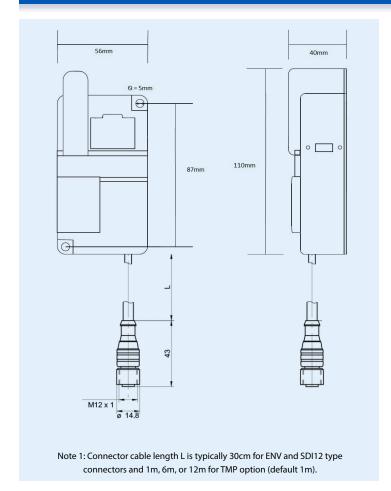








#### Hardware Dimensions, Product Options & Connector Pin-outs

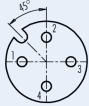


# WASP-aG-1ccc-1ccc-EA EA "External Antenna" I/O Connector #2: ENV or SDI12 Type (M12 Style) I/O Connector #1: ENV or SDI12 Type (M12 Style)

Note 1: Connectors are labelled with a sensor connector position number only if the connector position is ambiguous

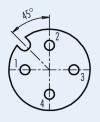
Note 2: Connectors size shown in this diagram are illustrative only - they are not drawn relative to the WASP body size

## Outpost "SDI12" Type Connector (M12 Style) - Pinout



- 1 15V Switched Power Output
- 2 Data
- 3 N/C
- 4 Common (GND)
- \* Diagram of connector external view

#### Outpost "ENV" Type Connector (M12 Style) - Pinout



- 1 15V Switched Power Output
- 2 Pulse Counter Input
- 3 4-20mA Input
- 4 Common (GND)
- \* Diagram of connector external view



SP Series Product Code	es ————————————————————————————————————
WASP-2G-1TMP	WASP 2G (GPRS) logger with 1 x Temperature probe
WASP-2G-2TMP	WASP 2G (GPRS) logger with 2 x Temperature probes
WASP-2G-1SDI12	WASP 2G (GPRS) logger with 1 x SDI12 Conns
WASP-2G-2SDI12	WASP 2G (GPRS) logger with 2 x SDI12 Conns
WASP-2G-1ENV	WASP 2G (GPRS) logger with 1 x ENV Conn (1 x Counter and 1 x 4-20mA channel)
WASP-2G-2ENV	WASP 2G (GPRS) logger with 2 x ENV Conns (each with 1 x Counter and 1 x 4-20mA channel)
WASP-2G-1ENV-1SDI12	WASP 2G (GPRS) logger with 1 x ENV Conn (1 x Counter and 1 x 4-20mA channel) & 1 x SDI12 Conn
WASP-2G-1ENV-1TMP	WASP 2G (GPRS) logger with 1 x ENV Conn (1 x Counter and 1 x 4-20mA channel) & 1 x Temperate probe
WASP-2G-1SDI12-1TMP	WASP 2G (GPRS) logger with 1 x SDI12 Conn & 1 x Temperate probe
WASP-2G-1TMP-EA	WASP 2G (GPRS) logger with 1 x Temperature probe, External Antenna
WASP-2G-2TMP-EA	WASP 2G (GPRS) logger with 2 x Temperature probes, External Antenna
WASP-2G-1SDI12-EA	WASP 2G (GPRS) logger with 1 x SDI12 Conns, External Antenna
WASP-2G-2SDI12-EA	WASP 2G (GPRS) logger with 2 x SDI12 Conns, External Antenna
WASP-2G-1ENV-EA	WASP 2G (GPRS) logger with 1 x ENV Conn (1 x Counter and 1 x 4-20mA channel), External Antenna
WASP-2G-2ENV-EA	WASP 2G (GPRS) logger with 2 x ENV Conns (each with 1 x Counter and 1 x 4-20mA channel), External Antenna
WASP-2G-1ENV-1SDI12-EA	WASP 2G (GPRS) logger with 1 x ENV Conn (1 x Counter and 1 x 4-20mA channel) & 1 x SDI12 Conn, External Antenr
WASP-2G-1ENV-1TMP-EA	WASP 2G (GPRS) logger with 1 x ENV Conn (1 x Counter and 1 x 4-20mA channel) & 1 x Temperate probe, External A
WASP-2G-1SDI12-1TMP-EA	WASP 2G (GPRS) logger with 1 x SDI12 Conn & 1 x Temperate probe, External Antenna
WASP-3G-1TMP	WASP 3G (HSDPA) logger with 1 x Temperature probe
WASP-3G-2TMP	WASP 3G (HSDPA) logger with 2 x Temperature probes
WASP-3G-1SDI12	WASP 3G (HSDPA) logger with 1 x SDI12 Conns
WASP-3G-2SDI12	WASP 3G (HSDPA) logger with 2 x SDI12 Conns
WASP-3G-1ENV	WASP 3G (HSDPA) logger with 1 x ENV Conn (1 x Counter and 1 x 4-20mA channel)
WASP-3G-2ENV	WASP 3G (HSDPA) logger with 2 x ENV Conns (each with 1 x Counter and 1 x 4-20mA channel)
WASP-3G-1ENV-1SDI12	WASP 3G (HSDPA) logger with 1 x ENV Conn (1 x Counter and 1 x 4-20mA channel) & 1 x SDI12 Conn
WASP-3G-1ENV-1TMP	WASP 3G (HSDPA) logger with 1 x ENV Conn (1 x Counter and 1 x 4-20mA channel) & 1 x Temperate probe
WASP-3G-1SDI12-1TMP	WASP 3G (HSDPA) logger with 1 x SDI12 Conn & 1 x Temperate probe
WASP-3G-1TMP-EA	WASP 3G (HSDPA) logger with 1 x Temperature probe
WASP-3G-2TMP-EA	WASP 3G (HSDPA) logger with 2 x Temperature probes
WASP-3G-1SDI12-EA	WASP 3G (HSDPA) logger with 1 x SDI12 Conns, External Antenna
WASP-3G-2SDI12-EA	WASP 3G (HSDPA) logger with 2 x SDI12 Conns, External Antenna
WASP-3G-1ENV-EA	WASP 3G (HSDPA) logger with 1 x ENV Conn (1 x Counter and 1 x 4-20mA channel), External Antenna
WASP-3G-2ENV-EA	WASP 3G (HSDPA) logger with 2 x ENV Conns (each with 1 x Counter and 1 x 4-20mA channel), External Antenna
WASP-3G-1ENV-1SDI12-EA	WASP 3G (HSDPA) logger with 1 x ENV Conn (1 x Counter and 1 x 4-20mA channel) & 1 x SDI12 Conn, External Anter
WASP-3G-1ENV-1TMP-EA	WASP 3G (HSDPA) logger with 1 x ENV Conn (1 x Counter and 1 x 4-20mA channel) & 1 x Temp probe, External Anter

WASP Accessories	
ACC-ANT-ENV-3DB-850	Accessory, Antenna for Environmental applications with 5m cable and mounting bracket, 3dB gain @ 850Mhz
ACC-ANT-ENV-3DB-900	Accessory, Antenna for Environmental applications with 5m cable and mounting bracket, 3dB gain @ 850Mhz
ACC-CONN-M12-6MM	Accessory, Connector for sensors & meters, M12 style, cable gland for max 6mm cable, internal screw assembly
ACC-CONN-M12-8MM	Accessory, Connector for sensors & meters, M12 style, cable gland for max 8mm cable, internal screw assembly

WASP 3G (HSDPA) logger with 1 x SDI12 Conn & 1 x Temperate probe, External Antenna



WASP-3G-1SDI12-1TMP-EA