

Xtralis Power Supply Units are uniquely designed to complement the style and appearance of Xtralis aspirating smoke detectors (ASD) and are technically matched to provide sufficient current and battery charging capacity to meet the requirement of EN 54-4.

The VPS-220-U and VPS-215-U models are LPCB approved and CE marked to the EN54-4 so are particularly suitable for use in territories where these approvals are required. It may also be suitable in territories where ISO 7240-4 is required.

# Style U product range

#### VPS-220-U: 0.5 A load / 14 Ah batteries (max)

This is the premier unit. Designed with the same foot print, color and layout as the VESDA VLP and VESDA VLS, the power supply will visually blend with the detectors

Internally is an EN54-4 approved Power Supply rated to provide a 0.5 amp continuous 24 Vdc supply while also charging the batteries (not supplied) which can be a 7, 12 or uniquely, 14 Amp/hr arrangement making it suitable for most multi-pipe ASD systems.

With regard to installation, cable entry knockouts all line up with the VESDA VLP and VESDA VLS enclosure allowing positioning of the power supply directly adjacent to the detector. The front cover supports 2 LEDs giving a quick visual indication of OK and/or fault condition.

# VPS-215-U: 0.5 A load / 7 Ah batteries (max)

This is the budget unit. It is intended as a low cost unit to supply a single pipe ASD detector which only requires 7 Ah batteries. A simple but elegant construction and no LEDs on the lid keep the cost of the unit to a minimum.

This unit is still engineered to compliment the product with cable entry knockouts lining up with the cable entries on various Xtralis detectors. The unit can also be inverted where necessary. The internal charger is EN54-4 approved and internal LEDs are provided to indicate OK and Fault.

#### **Features**

- Available in two sizes:
   0.5 A / 7 Ah and 0.5 A / 14 Ah
- Temperature compensated charging to maximize battery life
- Designed to blend in with VESDA detectors
- Knockouts designed to line up with VESDA units
- External LED indication on 220U
- Internal LED indication on 215U
- Relay outputs for connection to the general-purpose input.
- 110 / 230 Vac field selectable

## **Listings / Approvals**

LPCB



 CE 0832-CPD-1291 0832-CPD-1292 0832-CPD-1293



• EN54-4:1997+A1:2002+A2:2006



## **Specifications**

Part No.	VPS-220-U	VPS-215-U
Input	230 Vac (+10% / -15%) @ 0.6 A factory default setting 110 Vac (+10% / -15%) @ 1.2 A field selectable option	
Output Voltage	18 - 29 V DC	
Output Current Minimum Continuous Short Duration	0 A (EN 54-4 1 min.) 0.5 A (EN 54-4 1 max. a) 1.9 A (EN 54-4 1 max b)	
Dimensions (H x W x D)	225 x 350 x 105.2	225 x 285 x 115.2
Weight	3.6 kg (without batteries) 14.2 kg ( with max batteries)	2.95 kg (without batteries) 8.25 kg ( with max batteries)
Temperature	-5 to +40°C ambient	
Humidity	10-95% RH non-condensing	
IP Rating	IP30	
Batteries	Yuasa NP type or equivalent: 2 x 12 V, 7 Ah (NP7-12) or : 2 x 12 V, 12 Ah (NP12-12) or : 4 x 12 V, 7 Ah (NP7-12)	Yuasa NP type or equivalent: 2 x 12 V, 7 Ah (NP7-12)
Maximum Battery Current	2 A	1.6 A
Maximum Battery Resistance	0.6 Ω	
Indications	OK - green LED Fault - yellow LED Internal and External	OK - green LED Fault - yellow LED Internal only
Fault Relay	Change-over NO-COM-NC 2 A @ 30 Vdc	
Fuse Rating	Input - T3.15 A non-serviceable Current limit >2 A Battery fuse - T3.15 A Battery fuse type - European Sub-miniature Anti-surge Bussmann part no. BK/ETF3.15A (Farnell part 302-9992)	
Finish	Powder coast semi gloss	
Color	Light grey - RAL9018	
Mounting	4 x Ø5.5 mm holes on 318 x 175 centers	4 x Ø5.5 mm holes on 243 x 175 centers

## **Ordering Information**

VPS-215-U Xtralis 0.5 A 7 Ah PSU - Style U Xtralis 0.5 A 14 Ah PSU - Style U VPS-220-U 516.018.407 Xtralis 0.5 A 14 Ah PSU - OEM

#### **Configuration Information**

Style-U units are provided with an internal link for selecting the AC voltage. Units are configured to operate at 230 Vac when supplied but may be reconfigured in the field to operate at 110 Vac.

## **Technical Highlights**

Not all power supplies are equal:

- Style U power supplies can be operated at 230 Vac or 110 Vac which is selectable in the field. (alternatives may only operate at 230 Vac)
- Style U units provide invaluable fault reporting information at service access level to differentiate between mains fail, charger fail, battery high resistance and battery disconnect. (alternatives don't provide this)
- Style U power supplies perform full impedance checking of the batteries to ensure that the batteries are in good condition. (simpler alternatives may tolerate poor batteries which are unlikely to be able to provide the required hold up time in the event of a mains failure)
- Style U units disconnect the load (i.e. power down the Xtralis detector) after a prolonged period of mains failure to prevent permanent damage to the batteries. The load is not reconnected until mains is restored. (simpler alternatives may disconnect the load when the battery voltage fails but then
  - reconnect it almost immediately because the battery voltage tends to recover when the load is removed)
- Style U units use a tiny current (<1 mA) to monitor for restoration of mains power after disconnecting the load to protect the batteries (see point above) - thus ensuring that the batteries are unlikely to suffer a damaging deep discharge as long as the fault is attended to within a week.

(simpler alternatives draw larger currents to monitor for restoration of mains when in load-shed so are more likely to damage batteries)

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The Americas +1 781 740 2223 Asia +852 2916 8894 Australia and New Zealand +61 3 9936 7000 Continental Europe +32 56 24 19 51 UK and the Middle East +44 1442 242 330

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