iWAP106 Universal Zone 1 Access Point Enclosure

Zone 1 Explosion Proof Wireless Access Point enclosure system to allow standard WLAN hardware to be installed in potentially explosive, harsh, wet, and corrosive environments

ATEX / IECEx II 2 GD Ex d IIB+H2 T5 Ta 80°C Max

Ex tD A21 IP66, T100°C@Ta 80°C Max

IP66

-20°C/0°C to +40°C/+45°C /+50°C

Overview

The iWAP106 Zone 1 Access Point Enclosure is designed to allow the deployment of wireless networks in hazardous areas. The concept allows installation of equipment from leading WLAN vendors such as Cisco, Aeroscout, Aruba and Motorola. Each type of Access Point or RF transmitting device is rigorously checked and tested by Extronics and/or a Notified Body to ensure conformity to the ATEX requirements. This means that the user may select the vendor of their choice when extending a WLAN to hazardous areas. However equipment not already on the list overleaf will require assessment to determine its suitability.

The Extronics iWAP106 requires the use of high quality Ex e increased safety antennas (not included) such as the Extronics iANT100 series. Up to six antennas can be utilized, allowing the MIMO functionality of the latest 802.11n compatible wireless access points to be implemented, providing optimum coverage and maximum data throughput on Chemical Plants, Oil Refineries or Oil & Gas Platforms. Optional features include surge arrestors for lightning suppression in outdoor installations and single mode or multimode fibre optic inputs to allow for extended Ethernet link distance.

Features and Benefits

Rugged Enclosure
Custom enclosure with IP66 ingress protection made from marine grade aluminium, epoxy painted for installation in extremely arduous environments.

Future Proof Infrastructure
As new hardware becomes available it can be assessed by Extronics for compliance to the certification and the existing hardware replaced with the new version meaning the user is installing a future proof solution.

Gigabit Ethernet
Supports 100/1000Base-T/FX/LX options to offer a significant increase in speed over the older fast Ethernet standard.

MIMO Radio
Offers increased data throughput and higher immunity to signal interference for optimal performance in challenging industrial environments.

Specification

Certification Type	ATEX / IECEx II 2 GD Ex d IIB+H2 T5 Ta 80°C Max Ex tD A21 IP66 T100°C@Ta 80°C Max
Power Supply	Universal 90-264Vac or IEEE802.11af PoE
Maximum Power Consumption	Basic configuration: 25W With heaters: 125W
Enclosure Material	Aluminium-silicon primary alloy for castings with epoxy paint coat (Si 13%) UNIEN 1706:1999 ISO 3522:2007
Ingress Protection	IP66
Weight	Approx 30kg (hardware dependant)
Dimensions	415 x 315 x 250 mm (w x h x d)
Environmental	Ambient temperature: -20ºC to +50ºC (dependant on wireless hardware—see overleaf for details.) Relative humidity; 0 to 95%, non condensing
Input Connections	- AC power input screw terminals - 100/1000Base-T Ethernet on RJ45 socket - Single or Multi mode fibre input on LC connector
Ethernet Link distance	100/1000Base-T Ethernet on CAT5e: up to 100m 100Base-FX Multi Mode fibre : up to 2km 100Base-LX10 Single mode fibre: up to 10km 1000Base-LX Multi Mode fibre : up to 550m 1000Base-LX10 Single mode fibre: up to 10km
Output Connections	Up to six N-Type RF outputs via Ex d cable glands

Maximum Internal RF Cable Loss		2.4GHz	5.0Ghz	5.8GHz
	External N-type output	1.40dB	1.60dB	1.80dB
	With Surge Arrestor	1.55dB	1.75dB	1.95dB

Antennas	To be used with up to six iANT100 series Ex e antennas

Company Info:
Comm -Co
Kreekzoom 9
Tel: +3114-370030
Fax:+3114-370029
E-mail: Info@comm-co.com
www.atexshop.com
www.ruggedshop.nl
www.webpainter.nl

Ordering Information

WAP106 - Universal Zone 1 Access Point **iWAP106-[#1]-[#2]-[#3]-[#4]-[#5]-[#6]-[#7]**

Specify option [#1] - Wireless Network Hardware

Hardware supplied by customer*	C
Hardware supplied by Extronics	E

*Extronics can supply the certified wireless network hardware ,alternatively you may wish to "free issue" one of the already certified solutions so that we can factory fit it (see option #2 for certified hardware list). ***("Free Issue" means to supply and deliver to Extronics HQ at your own cost.)***

Specify option [#2] - Type Of Wireless Network Hardware *(Max operating temperature listed in brackets only applies to PoE powered units, take lower value if powered by AC. The minimum temperature range is also listed, the heater option will allow the temperature range of the AP's stated as 0°C, to be operated to a temperature of –20°C.)*

Aruba AP-134 Access Point	*(0°C to 40/45°C)*	29
Cisco AP3500 Access Point	*(-20°C to 45/50°C)*	33
Cisco AP1260 Access Point	*(-20°C to 45/50°C)*	35
Cisco AP1600 Access Point	*(-20°C to 45/50°C)*	36
Cisco AP2600 Access Point	*(-20°C to 45/50°C)*	37
Cisco AP3600 Access Point	*(-20°C to 45/50°C)*	38

Note: If an access point which is not listed above is required, Extronics can assess the access point for use within the iWAP106 universal access point enclosure. Contact Extronics for details.

Specify option [#3] - Power Supply

Universal 90-264VAC	AC
(If heater option [#7] selected the unit cannot have a universal voltage, it will be either 115VAC or 230VAC)	
IEEE802.3af compliant Power-Over-Ethernet	POE

Specify option [#4] - Ethernet Connection

100/1000Base-T Ethernet on CAT5 copper	C
Multimode 100Base-FX fibre with LC connector	F
Single mode 100Base-LX10 fibre with LC connector	S
Multimode 1000Base-LX fibre with LC connector	FG
Single mode 1000Base-LX10 fibre with LC connector	SG

Specify option [#5] - Number of Antenna Outputs for Radio 1

0 off N-type connector	0
1 off N-type connector	1
2 off N-type connector	2
3 off N-type connector	3
0 off N-type connector with surge protector	0S
1 off N-type connector with surge protector	1S
2 off N-type connector with surge protector	2S
3 off N-type connector with surge protector	3S

Specify option [#6] - Number of Antenna Outputs for Radio 2

0 off N-type connector	0
1 off N-type connector	1
2 off N-type connector	2
3 off N-type connector	3
0 off N-type connector with surge protector	0S
1 off N-type connector with surge protector	1S
2 off N-type connector with surge protector	2S
3 off N-type connector with surge protector	3S

Specify option [#7] - Enclosure Heating (not compatible with universal 90-264VAC or POE supplies)

No enclosure heating	N
230VAC enclosure heating	H1
115VAC enclosure heating	H2

(If heater option [#7] selected the unit will only be T3 Ta 80°C Max or T150°C@Ta 80°C Max*)*

Accessories

Stainless Steel 316L Mounting bracket for up to 3 off iANT100 series antennas	iANTMB06
Stainless Steel 316L Enclosure Pipe mount bracket for iWAP106 Enclosure	iWAPMB02

Company Info: Tel: +3114-370030 www.atexshop.com
Comm -Co Fax:+3114-370029 www.ruggedshop.nl
Kreekzoom 9 E-mail: Info@comm-co.com www.webpainter.nl