



**iWAP  
XN3**

## Universal wireless enclosure system for Zone 2 and Division 2 hazardous areas

Use any wireless technology, including Wi-Fi access points, UHF RFID readers, LTE routers, IoT gateways including LoRa, and more

ATEX and IECEx Zone 2 and 22 certified

cMETus Class I, II Division 2 and Zone 2 certified

Available in four sizes to suit your chosen wireless technology

Your choice of wireless technology

Fully certified for hazardous areas

Highly rugged, IP66 and NEMA 4 rated

Use non-certified antennas with the intrinsically safe RF outputs

Easy installation and low maintenance

Suitable for a wide range of temperatures

# SPECIFICATION



Certification	<p>  II 3 (3) G Ex ec [ic Gc] nR IIC T6 Gc                      3 (3) D Ex [ic Dc] tc IIIC T85°C Dc                      cMETus Class I, Div 2, Groups A - D                      Class II, Div 2, Groups F - G                      cMETus Class I, Zone 2 AEx ec ic nR IIC T6 Gc                      Class II, Zone 22 AEx ec ic tc IIIC T85°C Dc                      -40°C ≤ Tamb ≤ 60°C                 </p>																											
Power supply	Specify POE / POE+ IEEE802at, AC or DC power																											
Maximum power consumption	Dependant on access point chosen and power supply option, see below																											
Enclosure material	Marine grade copper-free aluminium alloy with electrophoretic base and polyester powder top coat																											
Ingress protection	IP66 and NEMA 4																											
Enclosure weight (approx. excluding AP)	<table border="0"> <tr> <td>Model 15</td> <td>7.8 Kg</td> </tr> <tr> <td>Model 24</td> <td>10.3 Kg</td> </tr> <tr> <td>Model 30</td> <td>12.0 Kg</td> </tr> <tr> <td>Model 36</td> <td>13.7 Kg</td> </tr> </table>	Model 15	7.8 Kg	Model 24	10.3 Kg	Model 30	12.0 Kg	Model 36	13.7 Kg																			
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Dimensions (including connection chamber and mounting points)	<table border="0"> <tr> <td>Model 15</td> <td>293 x 388 x 220 mm (height x width x depth)</td> </tr> <tr> <td>Model 24</td> <td>383 x 388 x 220 mm</td> </tr> <tr> <td>Model 30</td> <td>443 x 388 x 220 mm</td> </tr> <tr> <td>Model 36</td> <td>503 x 388 x 220 mm</td> </tr> </table>	Model 15	293 x 388 x 220 mm (height x width x depth)	Model 24	383 x 388 x 220 mm	Model 30	443 x 388 x 220 mm	Model 36	503 x 388 x 220 mm																			
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Operating temperature	Dependant on access point chosen, see below																											
Storage temperature	Dependant on access point chosen, see below																											
Relative humidity	0 to 95%, non-condensing																											
Input connections	POE / POE+ Gigabit Ethernet on Weidmuller 8-way wired connector with console connections RJ45 and mini USB B sockets <u>or</u> AC or DC power via Phoenix 1829167 socket with console connections RJ45 and mini USB B sockets <u>and either</u> Gigabit Ethernet on RJ45 connector <u>or</u> Dual LC fibre connector (specify multi mode or single mode fibre)																											
Output connection	<p>Up to 8 galvanically isolated, intrinsically safe external RF outputs via external N-type RF connectors (maximum of 6 top or 6 bottom mounted). Internal surge arrestors are optional. Antennas may be Direct (top) mounted or Remote (bottom) mounted. Unless otherwise specified, Extronics will use the same number of RF outputs as available on the wireless device(s) chosen.</p> <table border="1"> <thead> <tr> <th>Frequency band</th> <th>Insertion loss (dB)</th> <th>Loss including surge arrester (dB)</th> </tr> </thead> <tbody> <tr> <td>150MHz - 1GHz</td> <td>0.25</td> <td>0.40</td> </tr> <tr> <td>1GHz - 3.5GHz</td> <td>0.33</td> <td>0.48</td> </tr> <tr> <td>3.5GHz - 6GHz</td> <td>0.38</td> <td>0.53</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Spot frequency</th> <th>Insertion loss (dB)</th> <th>Loss including surge arrester (dB)</th> </tr> </thead> <tbody> <tr> <td>400MHz</td> <td>0.22</td> <td>0.37</td> </tr> <tr> <td>900MHz</td> <td>0.24</td> <td>0.39</td> </tr> <tr> <td>2.45GHz</td> <td>0.32</td> <td>0.47</td> </tr> <tr> <td>5.5GHz</td> <td>0.36</td> <td>0.51</td> </tr> </tbody> </table>	Frequency band	Insertion loss (dB)	Loss including surge arrester (dB)	150MHz - 1GHz	0.25	0.40	1GHz - 3.5GHz	0.33	0.48	3.5GHz - 6GHz	0.38	0.53	Spot frequency	Insertion loss (dB)	Loss including surge arrester (dB)	400MHz	0.22	0.37	900MHz	0.24	0.39	2.45GHz	0.32	0.47	5.5GHz	0.36	0.51
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# ORDERING INFORMATION



## IWAP XN3 -[#1]-[#2]-[#3]-[#4] -[#5]-[#6]-[#7]-[#8]-[#9]

### Specify option [#1]

Certification type	ATEX / IECEx and MET	AIUS
	ATEX / IECEx only	AI

Select AI only if the wireless device to be fitted does not have applicable US Ordinary Locations approvals: Extronics can advise.

### Specify option [#2]

Wireless network hardware supply	Extronics can supply the wireless hardware, or you may wish to 'free issue' (supply and deliver to Extronics at your cost) one of the already assessed solutions (see option #3), which we will factory fit.	
	Hardware supplied by customer	C
	Hardware supplied by Extronics	E

### Specify option [#3]

Wireless network hardware type	Operating temperature listed in brackets applies to POE or mains powered units with no solar loading. Device temperature ranges are subject to certification limit of -40°C to +60°C.	
	Cisco AIR AP3802e access point (-20°C to +40°C)	66
	Cisco AP1562e access point (-40°C to +55°C)	72
	Aruba AP-318 access point (-40°C to +50°C)	82
	Aruba AP-314 access point (0°C to +40°C)	71
	New wireless hardware - order code to be advised	TBC

### Specify option [#4]

Power supply	POE / POE+ IEEE802at compliant (chosen device must be compatible)	POE
	110 - 240 VAC supply	AC
	24 VDC	DC

### Specify option [#5]

Ethernet connection	Gigabit Ethernet on CAT6 copper	C
	Multi mode 1000BASE-LX fibre with dual LC connector	MF
	Single mode 1000BASE-LX fibre with dual LC connector	SF

If a media converter is NOT required, the codes MFD or SFD will be designated by Extronics. A Media Converter may not be required if the wireless device can accept Direct fibre input via an SFP

# ORDERING INFORMATION



<b>Specify option [#6]</b>		
<b>Surge protection</b>	Antenna surge protection fitted	S
	No antenna surge protection	N
If surge protection is selected, Ethernet surge protection will also be included if option [#5] Ethernet CAT6 is selected.		
<b>Specify option [#7]</b>		
<b>Antenna mounting</b>	Direct mounted antennas with connectors on top of enclosure	D
	Remote mounted antennas with connectors on underside of enclosure	R
<b>Specify option [#8]</b>		
<b>Cable entries</b>	2 x M20 on underside of connection chamber	M20
	2 x ½" NPT on underside of connection chamber	NPT
<b>Specify option [#9]</b>		
<b>Additional wireless device to be included</b>	No additional wireless device to be included	N
If an additional wireless device is required, please contact Extronics for compatibility and pricing. An additional device may require Remote antenna mounting, even if Direct mounted antennas have been specified for the primary device		
<b>Choice of Model:</b>		
Extronics engineers will select the optimum model number/enclosure size for the wireless hardware and option combination selected.		
<b>Accessories:</b>		
	iANT2xx range of rugged simple apparatus antennas (see separate data sheets)	IANT2xx
	316L stainless steel pipe mount bracket kit for iWAP XN3, to fit 2¼ - 2½" (58.0 - 63.5mm) diameter pipe.	IWAPMB08
	iWAP XN3 Test Kit for verifying Ex nR seals. Required to be used only if the Ex nR enclosure has been opened for repair.	IWAPTK01