

## iWAP300-A Industrial WiFi Access Point



**Industrial WiFi Access Point for use in potentially explosive, harsh, wet, and corrosive environments**

**-40°C to +70°C**

**Note: ambient temperature depends on whether the enclosure heater or cooler option is fitted**

**IP66 protection**

**316L stainless steel construction**

### Overview

The iWAP300A Industrial Wireless 802.11 Access Points provide reliable secure WiFi connectivity for your industrial facility. The dual radio tri-mode Access Points are part of our Meru powered Wireless LAN System, which consists of coordinated Extronics iWAP AP's at the edge and centralised Meru controllers for management, security and coordination for over-the-air reliability and Quality of Service (QoS). The iWAP300-A also comes as standard with best in class security, basic Voice over WLAN (VoWLAN) support, and reliability essential for Enterprise-class WiFi connectivity.

#### Reliable Connectivity Anywhere

The Meru powered iWAP300-A is especially suited for deployments in industrial environments where RF multi path interference often causes problems for standard WLANs. The iWAP300-A is a plug-and-play device that needs no configuration and no complex RF channel planning. Centralised configuration with Meru controllers and RF coordination provided by Meru Air Traffic Control™ technology eliminates costly installation steps and improves the throughput of the complete network.

#### Multi-Layered Security

To help deliver greater security for the WLAN, Extronics Meru powered AP's go beyond the basic over the air protection by providing multi-layered security policies. Local and Radius MAC Filtering, WPA2, WPA, 802.1x and WEP. No security information is contained within the AP and they only operate with the Meru controllers, it is also possible to have a different security policy assigned to a specific group of users or to a particular VLAN.

#### Centralised RF Management Lowers Operational costs

The iWAP300-A Access Points are controlled by a Meru Controller residing in the safe area which allows configuration and control of the system from a local terminal or remote PC

#### Designed For Extreme Environments

The Extronics iWAP300-A is designed for use with one or two standard antennas or Extronics iANT200 series of intrinsically safe antennas for optimum coverage on Chemical Plants, Oil Refineries or Oil & Gas Platforms. Optional features include surge arrestors for lightning suppression in outdoor installations, multimode fibre inputs for the Ethernet, enclosure heating and cooling for extreme ambient temperatures and anti-condensation plus the option of plug and socket cable entry instead of cable glands.

### Features and Benefits

#### Single Channel Infrastructure for the Easiest to Deploy Network

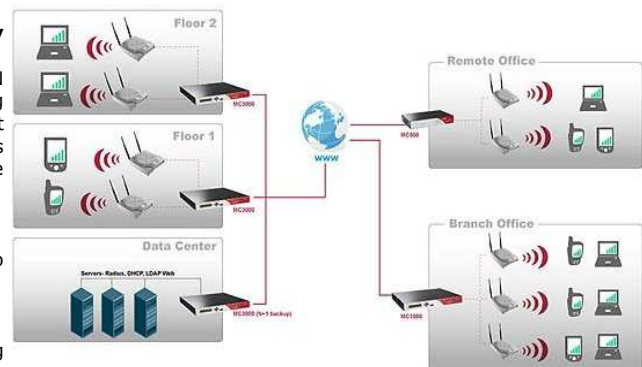
The iWAP300-A is the easiest to deploy enterprise class WLAN because the single channel architecture eliminates channel planning required in a traditional WLAN significantly reducing costs. Also most suitable for plants with background noise on certain 802.11 channels as a noise free channel can be chosen for deployment, not possible with the traditional 1, 6, 11 channel planning WLAN.

#### Convenient Network Expansion

Add new AP's as more bandwidth is required without having to change channel planning.

#### Dual Radios and Wireless Backhaul Capability

Dual radios enable simultaneous support of 802.11a and 802.11b/g if required. Also a MESH wireless backhaul can be configured in locations where network cabling is to expensive to install.



320645 Issue 3

## Specification

<b>Power Supply</b>	Universal 90-264VAC, 24VDC or IEEE802.3af POE (If heating and/or is used AC voltage is not universal voltage, only 115VAC or 230VAC may be used)
<b>Maximum Power Consumption</b>	Without heating or cooling 16W With cooling 21W With heating and cooling 121W
<b>Enclosure Material</b>	316L Stainless Steel
<b>Ingress Protection</b>	IP66
<b>Weight</b>	Approximately 10 Kg
<b>Dimensions</b>	390 x 286 x 300 mm (h x w x d)
<b>Environmental</b>	Operating temperature: Without heating or cooling -20°C to 55°C With cooling -20°C to 70°C With heating and cooling -40°C to 70°C  Storage temperature; -20°C to 70°C  Relative humidity; 0 to 95%, non condensing
<b>Input Connections</b>	10/100BaseT Ethernet on RJ45 socket and screw terminals 115V/230VAC input option on screw terminals 24VDC input option on screw terminals Multimode fibre input option on ST connectors Note that connectors may be specified as an option in the ordering data
<b>Output Connections</b>	Dual energy-limited external RF outputs via N-type RF connectors with optional lightning arrestors
<b>Security &amp; Encryption</b>	MAC filtering, WEP keys of 40, 64 or 128 bits, WPA, WPA2, TKIP, AES, VPN pass-through, Captive portal for guest access.
<b>Wireless Specifications</b>	Two Radios—IEEE 802.11a & IEEE 802.11b/g
<b>Frequency Ranges</b>	2.40-2.50 GHz, channels 1-14 5.180-5.240 GHz, 8 channels (34, 36, 38, 40, 42, 44, 46, 48) 5.280-5.320 GHz, 4 channels (52, 56, 60 and 64) 5.745-8.825, 5 channels (149, 153, 157, 161 and 165) Note: All channel configurations are country dependent
<b>Receive Sensitivity (typical)</b>	802.11a; -70dBm at 54 Mbps, -86 dBm at 6 Mbps 802.11b; -85 at 11 Mbps, -93 dBm at 1 Mbps 802.11g; -73 dBm at 54Mbps, -85 dBm at 6 Mbps
<b>Transmit Power</b>	+2dBm (1.5mW) to +20dBm (100mw) for 802.11b/g, +2dBm (1.5mW) to +16dBm (40mW) for 802.11a, variable in 1dBm increments
<b>Internal Losses From Antenna Connector To RF Transmitter</b>	2.4GHz = 0.55dB (add 0.5dB if surge arrestors are fitted) 5GHz = 0.8dB (add 0.8dB if surge arrestors are fitted)
<b>Antennas</b>	Any Suitable antenna e.g. Extronics iANT200 series

## Ordering Information

**iWAP300-A - Industrial WiFi Access Point**

**iWAP300-A-[#4]-[#5]-[#6]-[#8]-[#9]-[#10]**

**Specify option [#4] - Power Supply**

Universal 90-264VAC (If heater option [#8] selected the unit is not universal voltage, either 115 or 230VAC)

24V DC

IEEE802.3af compliant Power-Over-Ethernet

AC  
DC  
POE

**Specify option [#5] - Ethernet Connection**

10/100BaseT Ethernet on CAT5 copper

Multimode 10/100BaseFX fibre with ST connector

C  
F

**Specify option [#6] - 2 x Antenna Lightning Protection**

No Surge Arrestors

Surge Arrestors Fitted

N  
S

**Specify option [#8] - Enclosure Heating (not compatible with universal 90-264VAC or POE supplies)**

No enclosure heating

230VAC enclosure heating

115VAC enclosure heating

24VDC enclosure heating

N  
H1  
H2  
H3

**Specify option [#9] - Enclosure Cable Entry**

Cable glands fitted

Quick Release Sockets fitted (Not for fibre optic input)

G  
S

**Specify option [#10] - Enclosure cooling (not compatible with POE supply)**

No enclosure cooling

Enclosure cooling fitted

N  
C