

Getting Started Guide

P/N 067151-003

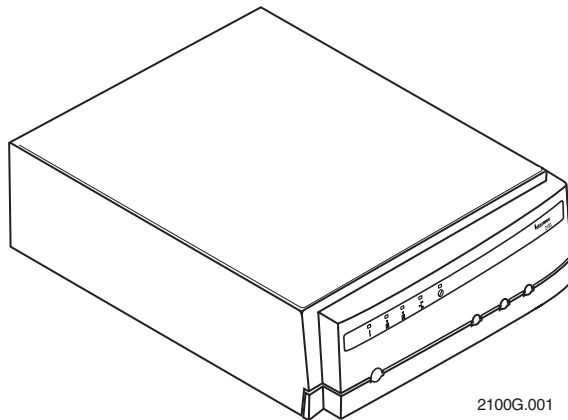
21XX Universal Access Point™



A **UNOVA** Company

About the 21XX Universal Access Point

The 21XX Universal Access Point™ (UAP) functions as a transparent bridge between your wired and wireless networks.



You can use the UAP as

- an access point to provide connectivity between your wireless devices and your wired network.
- a point-to-point bridge to connect two wired networks, such as between buildings.
- a repeater to extend the range of your wireless devices.

After you configure and install the UAP, you can manage it remotely using SNMP, Telnet, or a Web browser.

System Requirements

To configure the 21XX Universal Access Point, you need:

- Power cable
- Antenna
- RS-232 null-modem cable
- Terminal or PC with open serial port

If you are using the UAP as an access point or point-to-point bridge, you also need:

- Ethernet cable drop and cable

More Information

This getting started guide provides information to configure and install the UAP using default settings. For information about setting filters or other parameters, see the *21XX Universal Access Point Technical Reference Manual* (Part No. 067150). The manual contains information about installing, configuring, troubleshooting, and upgrading your UAP.

To order a manual, contact your local Intermec sales representative. You can also download the manual from the Intermec Web site at www.intermec.com.

Warranty Information

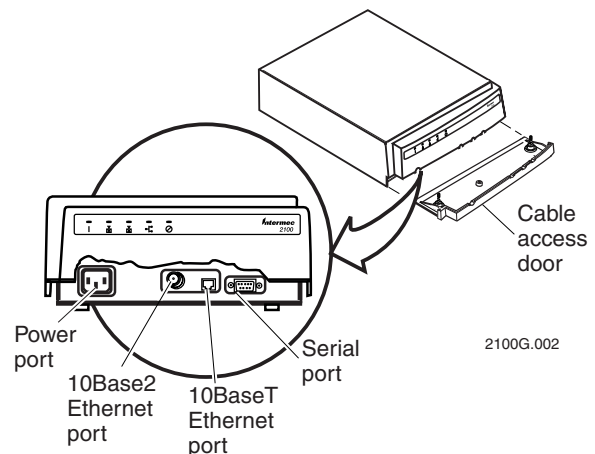
Opening this product may void the warranty. The internal workings of this product can only be accessed by Intermec service personnel. Radio replacements and upgrades require Intermec service personnel.

Configuring and Installing the UAP

You need to configure the UAP through the serial port before you install it in your network.

Accessing the Ports

You must remove the cable access door to access the Power, 10BaseT, 10Base2, and Serial ports. To remove the door, loosen the thumbscrews on the door and then slide it off.



Performing a Basic Installation

Follow these steps to configure and install the UAP in your network.

1. Attach an antenna or antenna cable to the antenna connector at the rear of the UAP.
2. Use the RS-232 null-modem cable to connect the serial port on the UAP to a serial port on your PC.
3. Connect the power cable to the UAP and then to a power source.
4. Configure the serial communications parameters on your PC to:

9600	baud
8	data bits
no	parity
1	stop bit
no	flow control
5. The logon screen appears on your PC. Log onto the UAP configuration menus using the default password *Intermec*.
6. Configure these parameters:
IP Address
IP Subnet Mask
LAN ID (Domain)

You may also need to configure IP Router.
7. Configure the radio parameters.
 - If you are using 2.4 GHz OpenAir radios, configure these parameters:
Channel
Subchannel
Security ID
Node Type
 - If you are using 900 MHz Falcon radios, configure Mode-Channel.
 - If you are using IEEE 802.11 DS radios, configure these parameters:
Network name
Frequency
8. Save the configuration.
9. Disconnect the null-modem and power cables.

10. Mount the UAP.

To mount the UAP vertically to a wall or beam, you can use the mounting bracket kit, Part No. 068918, or the rotating mounting bracket kit, Part No. 068751.

11. Reconnect the UAP to a power supply.
12. If you are using the UAP as an access point or point-to-point bridge, connect the UAP to the Ethernet network.

Specifications

Physical

Dimensions 95 mm x 236 mm x 355 mm
(3.75 in x 9.3 in x 14 in)

Weight 2.63 kg (5.8 lb)

Environmental

Operating temperature 0°C to +50°C
(+32°F to +122°F)

With heater option -20°C to +50°C
(-4°F to +122°F)

With heater & bag options -30°C to 0°C
(-22°F to +32°F)

Storage temperature -40°C to +70°C
(-40°F to +158°F)

Relative humidity 10% to 90%
(non-condensing)

Environmental rating IP 54

Network

Data rate 10 Mbps (Ethernet)

Filtering rate 14,880 frames per second

Serial port max data rate 115,200 bps

SNMP agent Version 1 RFC 1213

Ethernet interfaces 10Base2
10BaseT

Architecture Transparent Bridge

Media Access protocol CSMA/CD

Ethernet compatibility Ethernet packet types
and Ethernet addressing

Electrical

Electrical rating	~100 to 240V 1.0 to 0.5A 50 to 60 Hz
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Radio Specifications

2.4 GHz OpenAir Radio

Data rate	1.6 Mbps
Channels	15
Range	150 m (500 ft) indoors 300 m (1,000 ft) outdoors
Frequency band	2.4 to 2.5 GHz (varies by country)
Radio type	Frequency hopping, spread spectrum
Radio power output	500 mW 100 mW (Europe)

900 MHz Falcon Radio

Data rate	90, 225, or 450 Kbps (depends on installation)
Channels	7 @ 90 Kbps 1 @ 225 or 450 Kbps
Range	396 m (1,300 ft) line of sight
Coverage	9,290 to 32,515 sq m (100,000 to 350,000 sq ft)
Frequency band	902 to 928 MHz
Radio type	Direct sequence, spread spectrum
Radio power output	250 mW

IEEE 802.11 Direct Sequence Radio

Data rate	2 Mbps or 1 Mbps
Channels	11 (North America), 13 (Europe), 4 (France), 1 (Japan)
Range: 2 Mbps	365 m (1,200 ft) open environment 167 m (550 ft) semi-open environment 61 m (200 ft) semi-obstructed environment 33 m (110 ft) heavily obstructed environment
1 Mbps	425 m (1,400 ft) open environment 198 m (650 ft) semi-open environment 76 m (250 ft) semi-obstructed environment 40 m (130 ft) heavily obstructed environment
Frequency band	2.4 to 2.5 GHz (varies by country)
Radio type	Direct sequence, spread spectrum
Radio power output	15dBm

Patent Information

Product is covered by one or more of the following patents: 4,910,794; 5,070,536; 5,295,154; 5,349,678; 5,394,436; 5,425,051; 5,428,636; 5,483,676; 5,504,746; 5,546,397; 5,574,979; 5,592,512; 5,680,633; 5,682,299.



6001 36th Avenue West
P.O. Box 4280
Everett, WA 98203-9280

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