

## NOMAD Wireless Intercom - AP-1000



The RTS Nomad Wireless Intercom System is an integrated digital wireless communications system consisting of belt packs and access points communicating over DECT (Digital Enhanced Cordless Telecommunications) wireless technology. Communication between the access points and the Matrix uses OMNEO technology, the Dante-based platform for high-quality audio over IP. DECT is a license-free, globally accepted standard for wireless communication.

The AP-1000 can be mounted in a variety of methods from wall mounting, handrail, poles and microphone stands (ordered separately). The AP-1000 provides radio coverage for multiple belt packs. The coverage area varies according to the environment and placement of the AP-1000. Coverage areas vary based on the environment, with a maximum indoor range of approximately 200 meters and a maximum outdoor range of about 300 to 500 meters.

The solid design of the RTS Nomad Wireless Intercom System is matched by the strength and flexibility of the communication system it supports. Integrating effortlessly with digital wired and legacy analog systems, Nomad redefines team coordination by wirelessly providing 16 channels of encrypted glitch-free audio and control to intercom users wherever they may roam.

- ▶ Designed to seamlessly integrate into your existing matrix or party-line system without disruption and expand as needs evolve.
- ▶ Supports two RJ45 and two SFP fiber connections for ease of deployment and redundancy.
- ▶ POE, battery, or local powering of the access point supports a wide range of applications.
- ▶ IP65 rated for outdoor installation.

### Technical specifications

#### General

	AP-1000 Access Point
Audio	BV32 wideband audio
Max. belt packs per AP-1000	Up to 10
Max. access points in a system	120
Ethernet type	100BASE-T or GigE
Protocols / standards	OMNEO ST-2110/ST2022-7 DECT
Ethernet cabling required	UTP CAT-5e or better
Input voltage (VDC)	
DC Power supply	+12 VDC, 4-pin XLR input (optional)
DC Battery	14.2 VDC, Anton Bauer, via 4-pin XLR input (optional)
PoE	Class 3 device (compatible with PoE, PoE+, or PoE++)
Power consumption	8.5 W, typical
LED indicators	4 (power, fault, connectivity, location)

**Environmental**

	<b>AP-1000 Access point</b>
Operating temperature (°F)	-4 °F - 131 °F
Operating temperature (°C)	-20 °C - 45 °C
Storage temperature (°F)	-4 °F - 158 °F
Storage temperature (°C)	-20 °C - 70 °C
Dimensions (H x W x D) (in)	9.02 x 7.60 x 3.00 (with bracket) 9.02 x 7.60 x 2.64 (w/out bracket)
Dimensions (H x W x D) (mm)	229 x 194 x 76 (with bracket) 229 x 194 x 67 (w/out bracket)
Weight (lb)	4.72 (with bracket) 4.14 (w/out bracket)
Weight (kg)	2.14 (with bracket) 1.88 (w/out bracket)
Ingress Protection (IP)	IP-65

**Connections**

	<b>AP-1000 Access Point</b>
Ethernet connectors	2 x EtherCon RJ-45 jacks
Power connector	1 x 4-pin XLR-F Jack (accepts power supply or battery supply)
Optical connector	2 x SFP
GPO connector	2 x GPO relay ports

**DECT Communications**

	<b>AP-1000 Access Point</b>
RF frequency range (MHz)	1,920 MHz - 1,930 MHz (US, Canada) 1,880 MHz - 1,900 MHz (EU = Europe, Asia, Australia) 1,894 MHz - 1,906 MHz (Japan) 1,910 MHz - 1,930 MHz (Mexico, South America)

	<b>AP-1000 Access Point</b>
Frequency selection	Automatic via DCS (Dynamic Channel Selection)
Modulation	DBPSK
Antennas	Dual, internal dipole antennas
High Difficulty DECT RF environments	Next generation DECT channel compensation
Maximum peak RF output power (mW) (dBm)	100 mW (20 dBm) (US, Canada, Malaysia) 250 mW (24 dBm)(Europe, Mexico, South America, Japan)
Average power (US, Canada, Malaysia) (dependent on the number of belt packs)	4 mW - 42 mW
Average power (Europe, Mexico, South America, Japan) (dependent on the number of belt packs)	10 mW - 105 mW

**Bluetooth Low Energy Communications**

	<b>AP-1000 Access Point</b>
BLE frequency range	2400 - 2483.5 MHz
Communication protocol	BLE 5.3 (Bluetooth Low Energy)
Modulation	GFSK
Antenna	Internal ¼-wave
Maximum output power	1 mW

**Ordering information****AP-1000 EU Access point EU**

IP-65 wireless access point providing communications to TR-1000 beltpacks

Order number **AP-1000 EU | F.01U.425.681**

**AP-1000-GRY EU Access point (grey) EU**

IP-65 wireless access point providing communications to TR-1000 beltpacks

Order number **AP-1000-GRY EU | F.01U.436.414**