Technical Data Sheet

Innovating the Future of Global Communications

AP-1800

ROAMEO Access Point

The RTS ROAMEO System is an integrated digital wireless communications system consisting of beltpacks and access points communicating of DECT (Digital Enahanced Cordless Telecommunications) wireless technology; while 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.

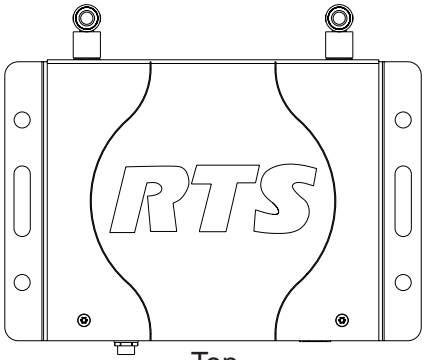
The ROAMEO AP-1800 is a stationary device intended for mounting on horizontal or vertical surfaces. Optionally, it can be mounted on a pole or handrail, using a mounting kit (ordered separately). The AP-1800 provides radio coverage for multiple belt packs. The coverage area varies according to the environment and placement of the AP-1800. Typical coverage areas range from 50 meters in most indoor applications to hundreds of meters in most outdoor applications

The solid design of the Roameo system is matched by the strength and flexibility of the communication system it supports.

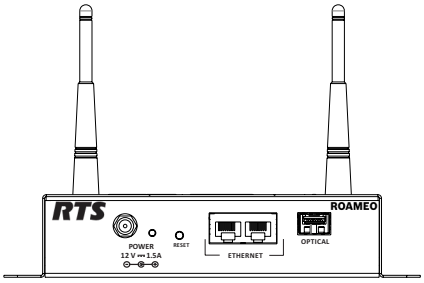
Features

- Designed to integrate seamlessly into your existing matrix system via an OMI (OMNEO Matrix Interface) card; enhancing your existing matrix system without disrupting other systems already in place.
- De-centralized system that easily expands as needs evolve, allowing the system to scale up by simply adding new access points and beltpacks.
- Supports two (2) voice codecs; G.722 for best audio quality and G.726 for large numbers of concurrent users in the system.
- Uses CAT-5e or better cable over standard Ethernet connections (802.3 Ethernet), by default. Also supports optional fiber connection.
- Supports flexible wiring designs for ease of installation. Multiple access points may be daisy chained using the dual RJ-45 connectors on the front panel. Up to seven APs or hops maximum.
- Low power usage, using approximately 6.5 Watts during typical conditions.
- No frequency planning is required for installation.

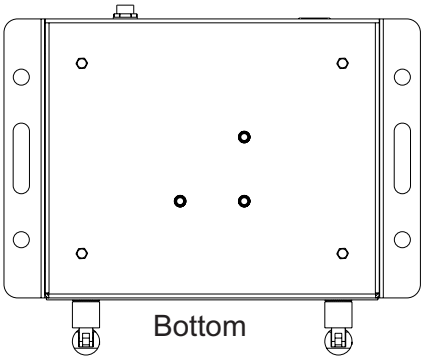
Line Drawings



Top



Front



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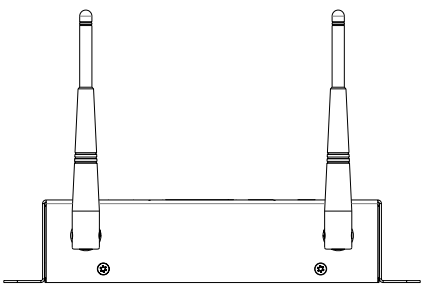

Rear

Specifications

General:

Audio Modes..... G.722 wideband
G.726 narrowband
Max. beltpacks per AP-1800 (G.722) ..... 5 (recommended 4 max.)
Max. beltpacks per AP-1800 (G.726) ..... 10 (recommended 8 max.)
Connectivity..... Standard 100Base-T or GigE Ethernet
Protocol Running on Ethernet .....OMNEO
Ethernet Cabling Required .....UTP CAT-5e or better
Power Supply Type.....External DC, Wall Wart
Power Supply Input .....100–240 VAC, 50–60 Hz, 0.6A
Power Supply Output (AP-1800 Input) ..... 12VDC @ 1.5A, positive center

Environmental:

Operating Temperature.....32°F – 122°F (0°C – 50°C)
Storage Temperature..... -4°F – 158°F (-20°C – 70°C)
Dimensions.....5.17 in. H x 7.67 in. W x 1.52 in. D
(13.13 cm H x 19.47 cm W x 3.86 cm D)
Weight (w/antennas)..... 0.992 lbs. (450 g)
Weight (w/o antennas)..... 0.893 lbs. (405 g)

Connections:

Ethernet Connectors..... 2 x Standard RJ-45 Jacks
Optical Connector..... Accepts small form factor pluggable SMP modules
RF Connectors .....Reverse-SMA-F

RF Communications:

Frequency Range..... 1880-1900 MHz (EU - Europe, Asia, Australia)
1920-1930 MHz (NA - North America)
Communication Protocol .....DECT
Carrier Frequency Selection..... Automatic via DCS
(Dynamic Channel Selection)
Modulation .....GFSK

Power:

Maximum Output Power (Peak) .....200mW (EU)
100mW (NA)
Average Power, load dependent (G.722, wideband)..... 17-83mW (EU)
Average Power, load dependent (G.726, wideband)..... 8-83mW (EU)
Average Power, load dependent (G.722, wideband)..... 8-42mW (NA)
Average Power, load dependent (G.726, narrowband) ..... 4-42mW (NA)

Antenna - Electrical:

Frequency.....1850-1990MHz
Gain 3dBi
Horizontal Beam Width.....360°
Impedance.....50 Ohm
Max. Power.....50W
VSWR..... <2:1
Polarization..... Linear - along length of antenna

Antenna - Mechanical:

Weight ..... 0.77 oz (22g)
Length..... 5.2 in. (133mm)
Max. Diameter 0.52in. (13.2mm)
Finish .....Matte Black
Connector ..... Reverse Polarity SMA Plug
Operating Temperature..... -40°F to 131°F (-40°C to 55°C)

AP-1800 Certifications:

RoHS, FCC Part 15D, FCC Part 15B, FCC/IC Class B device, IC RSS-213, IC ICES-003, CE, EN 301 406, EN 301 489-6, EN 60950-1, RCM, Singapore, Mexico

Specifications are subject to change without notification. Brand names mentioned are the property of their respective companies.

Order Information

Model • Commercial Code • Description

- TR-1800 • TR-1800 • TR-1800 Beltpack, US
- TR-1800 EU • TR-1800 EU • TR-1800 Beltpack EU
- AP-1800 • AP-1800 • AP-1800 Access Point, US
- AP-1800 EU • AP-1800 EU • AP-1800 Access Point, EU
- ANT-1800 • ANT-1800 • ANT-1800 Antenna
- TR-1800 Holster • TR-1800 Holster • TR-1800 Holster
- AP-1800 MT BRKT • AP-1800 MT BRKT • AP-1800 Mounting Bracket Kit

For ordering information, contact your regional sales representative at:
http://rtsintercoms.com/us/intercom/contact

Bosch Security Systems, Inc. | 12000 Portland Avenue South | Burnsville, Minnesota 55337
Telephone: 877·863·4169 | Fax: (800) 323-0498
Form Number: F.01U.306.748 Rev 03
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