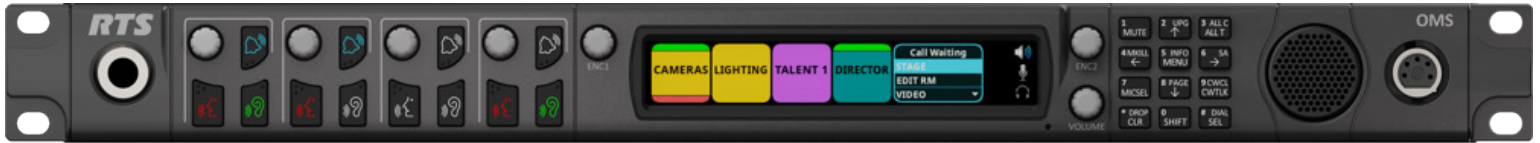


OMS OMNEO Main Station



The OMS Main Station is the beginning of a new era of intercom systems called RTS Digital Partyline. This powerful single system bridges legacy analog partyline users who wish to migrate to digital functionality while using their existing equipment. Furthermore, OMS connects both wired and wireless intercom products. OMS represents an incredibly versatile and easy-to-use solution for a wide range of applications – a communications multi-tool for theaters, houses of worship, industrial, broadcast and event venues.

Using OMNEO, OMS interconnects with our digital matrix products including keypanels, ROAMEO wireless and digital beltpacks. OMNEO is an architectural approach to connecting devices that need to exchange information such as audio content or device control (Dante & control). In addition, it can serve as a stand-alone base station for ROAMEO, RTS's digital wireless communication solution based upon DECT.

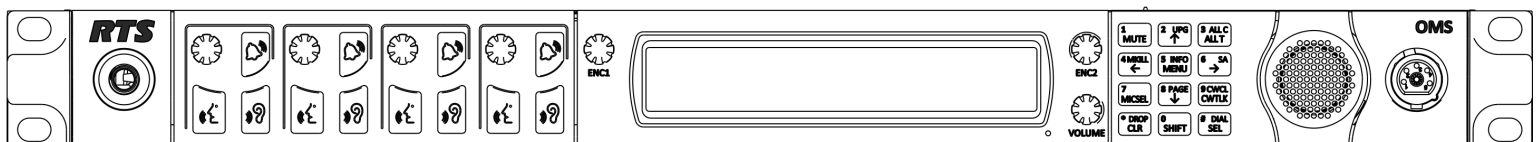
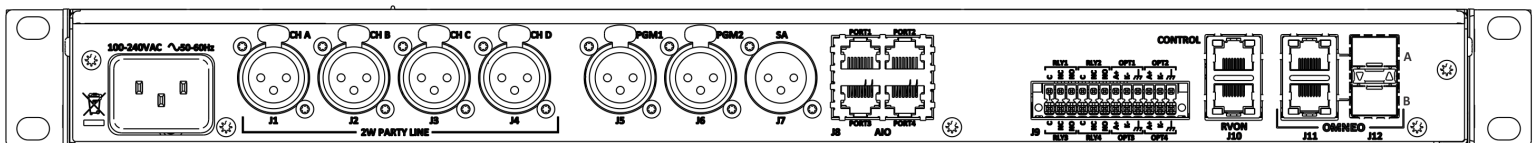
The OMS is available in five licensed models; Analog Only, Analog Plus, Basic, Intermediate and Advanced. The OMS allows for increased capacity and functionality as business needs grow.

The OMS has the easy-to-use RTS digital icon-based front panel display, along with a simplified menu structure to allow system configuration and control from the front panel and display.

Features

- Supports up to 40 OMNEO or ROAMEO belt packs and up to 16 party lines. Ethernet connectivity through copper or fiber connections available.
- Supports 4 ports of analog AIO 4-wire and 4 ports of analog 2-Wire (RTS / Audiocom / Clear-Com formats supported). Auto nulling capability (echo cancellation) available on 2-Wire interfaces.
- Supports up to 8 keypanels (any mix of analog/OMNEO/RVON) depending upon product licensing. (Maximum 4 analog)
- Up to 4 RVON channels available with the Advanced license for remote networking with other RVON capable equipment. G.711, G.729ab and G.722 codecs supported.
- Includes stage announce output and additional OMNEO expansion audio ports reserved for connecting and networking with other OMS units. These expansion ports allow additional system capacity and partyline capability as part of a distributed system.

Line Drawing



Specifications

Power Supply:

Type.....Locking IEC 320 C14 style connector
AC Input..... 100 VAC – 240 VAC, 60/50 Hz,
0.46 A / 0.24 A
Maximum Power
Consumption 30 W (based on 120 VAC)

Environmental:

Operating
Temperature 32° F – 113° F (0° C – 45° C)
Storage
Temperature-4° F – 158° F (-20° C – 70° C)

Dimensions:

19" w/ rack ears (17.56" w/o rack ears) W x 1.7" H x
7.72" D (including connectors)
(482.6 mm w/ rack ears [446.1 mm w/o rack ears] W x
43.7 mm H x 196.1 mm D [including connectors])

Weight:

OMS chassis 5.29 lbs (2.4 kg)

AIO 4-Wire Analog:

Connectors4 RJ-45 connectors
Signal Format Differential RX/TX audio with
differential RS-485 control data
Wiring Scheme Both 568B & USOC supported
A/D and D/A Resolution 24 bits
Max Input Level (balanced)20 dBu w/o clipping
Digital Input Gain Programmable
(-20 dB – 20 dB)

Input Frequency
Response +1 dB/-3 dB from 100 Hz – 20 kHz
THD+N (8dBu input,
unity gain) 0.025% non-weighted@1 kHz
<0.075% non-weighted, 100 Hz – 20 kHz
Nominal Input Impedance..... >22 kΩ
Nominal Output Level8 dBu
Digital Output Gain Programmable
(-20 dB – 20 dB)

Maximum Output
Level (balanced)20 dBu w/o clipping
Output Frequency
Response +1 dB / -3 dB from 100 Hz – 20 kHz
Output Noise Floor <-65 dBu
Crosstalk Isolation >80 dB

PGM1 & PGM2.....3-pin XLR-F
Signal Format Differential RX/TX audio
A/D Resolution..... 24 bits
Max Input Level (balanced)+20 dBu w/o clipping
Digital Input Gain Programmable
(-20 dB – 20 dB)

Input Frequency
Response +1 dB/-3 dB from 100 Hz – 20 kHz
THD+N (8dBu input,
unity gain) 0.025% non-weighted@1 kHz
<0.075% non-weighted, 100 Hz – 20 kHz
Nominal Input Impedance..... >22 kΩ
Nominal Input Level8 dBu
Digital Input Gain Programmable
(-20 dB – 20 dB)

SA (Stage Announce) (output).....3-pin XLR-M
Signal Format Differential RX/TX audio
D/A Resolution..... 24 bits
Max Output Level (balanced)20 dBu w/o clipping
Digital Output Gain Programmable
(-20 dB – 20 dB)

Maximum Output
Level (balanced)20 dBu w/o clipping
Output Frequency
Response +1 dB / -3 dB from 100 Hz – 20 kHz
Output Noise Floor <-65 dBu
Crosstalk Isolation >80 dB

2-Wire Party Line Analog:

Connector four 3-pin female XLR connectors
Modes/Port supported RTS CH1, RTS CH2
Audiocom (4 channel)
Clear-Com (4 channel)
4W/2W Echo Return Loss >45 dB

Unbalanced Operation (RTS/Clear-Com)

Expected Termination Impedance 200 Ω
Noise Contribution <-70 dBu
THD+N (w/ nominal input).... <0.5%, 200 Hz – 7.3 kHz
Bridging Impedance..... >10 kΩ
CALL Signaling 20 kHz (RTS mode)
12 VDC (Clear-Com mode)
MIC KILL Signaling 24 kHz (RTS mode)

Balanced Operation (Audiocom)

Expected Termination Impedance 300 Ω
Noise Contribution <-70 dBu
THD+N
(with nominal input) <0.5%, 200 Hz – 7.3 kHz
Bridging Impedance..... >10 kΩ
CALL Signaling 20 kHz (Audiocom mode)
MIC KILL Signaling 24 kHz (Audiocom mode)

General Purpose Input/Output Ports:

Relays (4 Relays)

Type..... SPDT
Contacts Common (C)
Normally Closed (NC)
Normally Open (NO)
Contact Rating..... 1A @ 48 VDC

Inputs (4 Inputs)

TypeOptically Coupled
Input Voltage..... 5 VDC – 12 VDC on A+

Note: A+ is internally pulled to +5 VDC. Connect K-
to chassis ground to activate.

Control Port:

Connector RJ-45
Format IEEE 802.3 compliant
Speed 10/100/1000 Mbps
LEDs.....Speed and Link/Activity

OMNEO Port (primary and secondary):

Maximum Capacity 48 Full-duplex ports
Copper Connector Type RJ-45
Format IEEE 802.3 compliant
Copper Ethernet Speed 100/1000 Mbps
LEDs.....Speed and Link/Activity
Fiber Connector TypeSmall Form
Factor Pluggable (SFP)

Multimode Finisar FTLF8519P3BNL
500m / 2.125Gbps
Single Mode.....Finisar FTLF1421P1BTL
15km / 2.67Gbps

Fiber Speed 100/1000Mbps
LEDs.....Speed and Link/Activity
LED Indicator..... Optical Signal Present
Note: SFF-8472 fiber diagnostics supported

RVON:

Compression	Bit Rate	Coding Delay	Playout Delay	Bandwidth	Sample Rate
G.711	64 kbps	125 μs	20-60 ms	160-224 kbps	8 k
G.729AB	8 kbps	10 μs	20-120 ms	32-112 kbps	8 k
G.722	64 kbps	4 μs	20-60 ms	160-224 kbps	16k

* Data rate depends codec selection

Note: The Playout Delay and Bandwidth depend on
the configured amount of audio per packet.

TFT Display:

Active Area 120.10 mm (wide) x 18.77 mm (high)
Dot Resolution576 x 90 pixels
Color Resolution16-bit (64K) RGB color
View Angle80° (typical, all directions)
Protective Lens.....Anti-Glare / Anti-Reflective

Agency Compliance:

- CE Compliant
- UL Certified
- PSE

Order Information

Order No.	Description
OMS ANALOG 4M	Main station 4ch A4M headset
OMS ANALOG 4F	Main station 4ch A4F headset
OMS ANALOG 5F	Main station 4ch A5F headset
OMS BASIC 4M	Main station Basic 4ch A4M headset
OMS BASIC 4F	Main station Basic 4ch A4F headset
OMS BASIC 5F	Main station Basic 4ch A5F headset
OMS INTERMED 4M	Main station Intermed 4ch A4M headset
OMS INTERMED 4F	Main station Intermed 4ch A4F headset
OMS INTERMED 5F	Main station Intermed 4ch A5F headset
OMS PLUS 4M	Main station Analog Plus 4ch A4M headset
OMS PLUS 4F	Main station Analog Plus 4ch A4F headset
OMS PLUS 5F	Main station Analog Plus 4ch A5F headset
OMS ADVANCED 4M	Main station Advanced 4ch A4M headset
OMS ADVANCED 4F	Main station Advanced 4ch A4F headset
OMS ADVANCED 5F	Main station Advanced 4ch A5F headset

Order No.	Description
OMS_A to AP	SW Upgrade Analog to Analog Plus
OMS_A to BAS	SW Upgrade Analog to Basic
OMS_A to INT	SW Upgrade Analog to Intermediate
OMS_A to ADV	SW Upgrade Analog to Advanced
OMS_AP to BAS	SW Upgrade Analog Plus to Basic
OMS_AP to INT	SW Upgrade Analog Plus to Intermediate
OMS_AP to ADV	SW Upgrade Analog Plus to Advanced
OMS_BAS to INT	SW Upgrade Basic to Intermediate
OMS_BAS to ADV	SW Upgrade Basic to Advanced
OMS_INT to ADV	SW Upgrade Intermediate to Advanced
OM-MM FIBER	Multimode fiber module
OM-SM FIBER	Singlemode fiber module