Mixed ADAM system with analog, RVON and OMNEO connectivity

RTS OMI ADAM matrix card

This card fits into the standard slots of the RTS ADAM or ADAM-M frames and provides a gateway to the world of OMNEO IP-compatible networking. The card consists of the traditional ADAM front and back card components and enhances ADAM systems with the following features:

- The OMI card is available in configurations up to 64 bidirectional ports upgradable in increments of 16 ports on a single card.
- In addition to the standard RJ45 Ethernet connection, fiber connectivity is also supported with the addition of optional single-mode or multimode modules.
- A fully configured single compact ADAM-M frame can support up to 256 OMNEO ports, providing a highly compact single-frame solution for many system installs.
- The ADAM frame supports an astounding 512 OMNEO ports, making it ideal for larger systems without the need for frame-to-frame linking.

RTS OKI keypanel interface card

This card fits into select RTS user stations and provides native OMNEO IP connectivity for RJ45 Ethernet connections into the OMNEO network with optional single or multimode fiber modules. The card provides a two-port switch onboard as a pass-thru connection to allow daisy-chaining of keypanels if required. It plugs into the existing header in the keypanel and comes with all parts needed to complete the upgrade. The OKI card is available for the RTS KP-32, RP-1000 or KP 12 CLD keypanel.

RTS OEI-2 (OMNEO external interface-2)

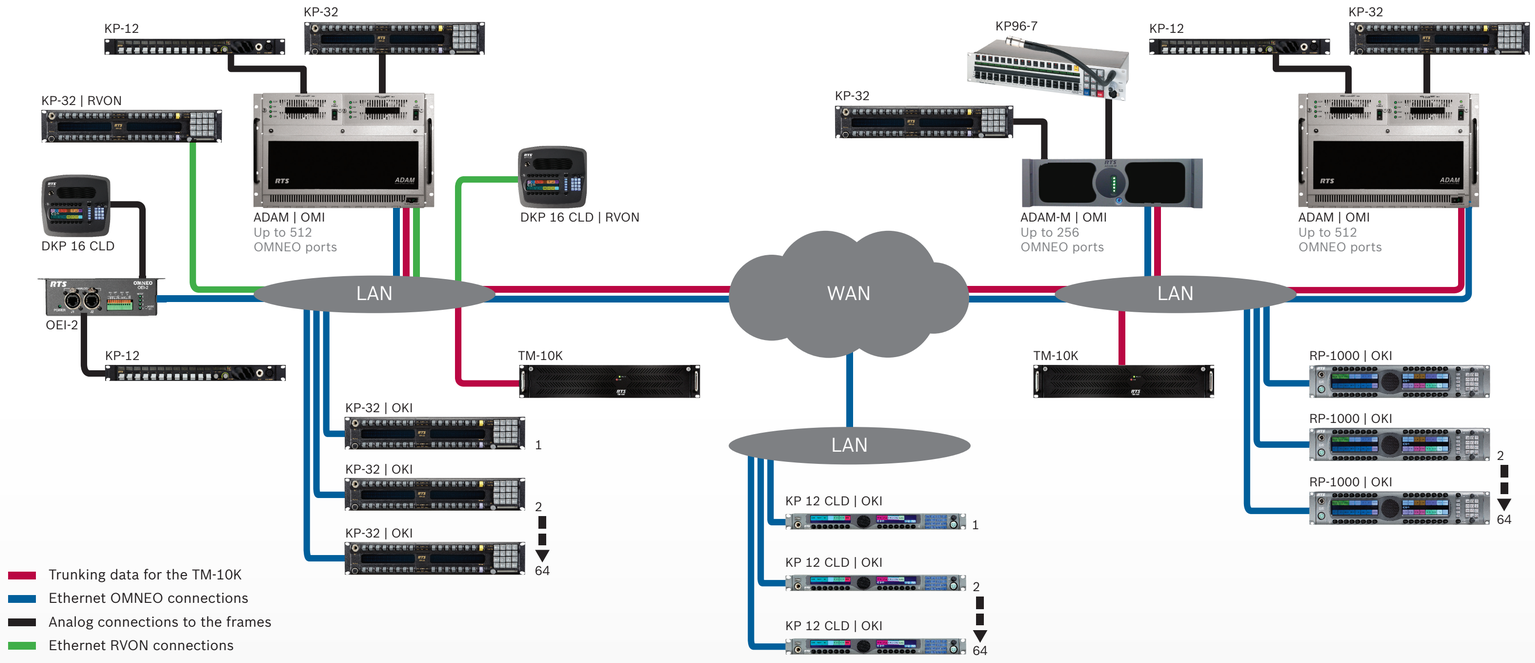
The OEI-2 enables connectivity between analog audio sources and legacy RTS keypanels and an OMNEO network. This allows users to maintain existing infrastructure and the equity of their original equipment investment while updating to high-performance OMNEO media networking architecture.

- Provides an interface between legacy RTS keypanels and RTS OMI OMNEO interface cards for ADAM and ADAM-M units.
- Support for both USOC or 586B wiring.
- Provides less than 20 ms of audio latency in typical network installations.
- Provides a frequency response of 20 Hz to 20 KHz to the keypanel.
- Supports DHCP and device discovery for easy set up and network management.
- Optional fiber connection – multi-mode or single-mode available.
- Supports CAT-5/5e and CAT-6 with dual Ethernet connectors for device looping.
- Supports compatibility with third-party Dante™ products available from numerous suppliers.

Optional accessories for OMI and OKI cards

Fiber connections are fully supported when the OMI or OKI cards are used in conjunction with the single mode or multimode fiber modules shown. These modules are easily plugged into the slot on the back of the card and support full fiber connectivity.

RTS+OMNEO ADAM intercom systems now have the ultimate in design and deployment flexibility



—with pure IP connectivity, ultra-low latency and full HD audio.

RTS+OMNEO media networking supports a PURE IP network infrastructure. Deploying a new RTS intercom solution has never been easier: an entire ADAM system can now be connected via OMNEO. Systems can be trunked together and user stations can be deployed all over standard Ethernet hardware. With the inherently high audio quality and low latency of the OMNEO connection, OMNEO links can be employed anywhere there is sufficient network bandwidth.

Adding OMNEO-connected user stations is easy with the new OMI and OKI card sets. Most existing ADAM intercom systems will support OMNEO connectivity by upgrading the ADAM system firmware and using the new IPedit configuration application. Current RTS analog user stations and trunks will seamlessly integrate with the new OMNEO connected keypanels. The system will perform as it always has, with the exception that now you can expand your network with standard IP network hardware.

RTS + OMNEO

= the ultimate IP solution for intercom

OMNEO is a media networking architecture for professional applications. Using standard IP Ethernets, media products that integrate OMNEO can be assembled into networks of 2 to 10,000 cooperating devices that exchange studio-quality synchronized multichannel audio and share common control systems.

OMNEO's media transport technology is Audinate's Dante™, a high-performance, standards-based, routable IP media transport system. OMNEO's system control technology is Open Control Architecture, or OCA. OCA is an open public standard for the control and monitoring of professional media networks.

Interoperability and Standards

OMNEO media networking has been designed from the ground up to be based on open public standards which are freely available to all without restriction. OMNEO leads the way toward interoperability by utilizing standards from the IEEE and IETF for media transport and will comply with emerging standards, such as AVB.

The control and configuration component OCA has been openly published as a proposed standard and is on track to be standardized by the AES under the project designation X-210. OMNEO is able to utilize standard Ethernet and IT hardware or infrastructure, but will also be able to take advantage of AVB-enabled bridges as these become available.

The new RTS ADAM OMNEO interface cards transform the ADAM intercom system into a flexible, IP-based, AVB-compatible intercom network. OMNEO media networking architecture ***goes beyond*** traditional AVB solutions by incorporating both industry-standard OCA control and IP audio. OMNEO will interoperate with AVB and Dante™ devices, ensuring future interconnectivity with a growing number of devices. ADAM OMNEO products open the door to deploy ADAM intercom systems over any standard IP-based network. Most importantly, with OMNEO users are not "locked in" to other vendors' proprietary backbone infrastructure. This makes RTS the leading IP open-network solution for professional production intercoms.

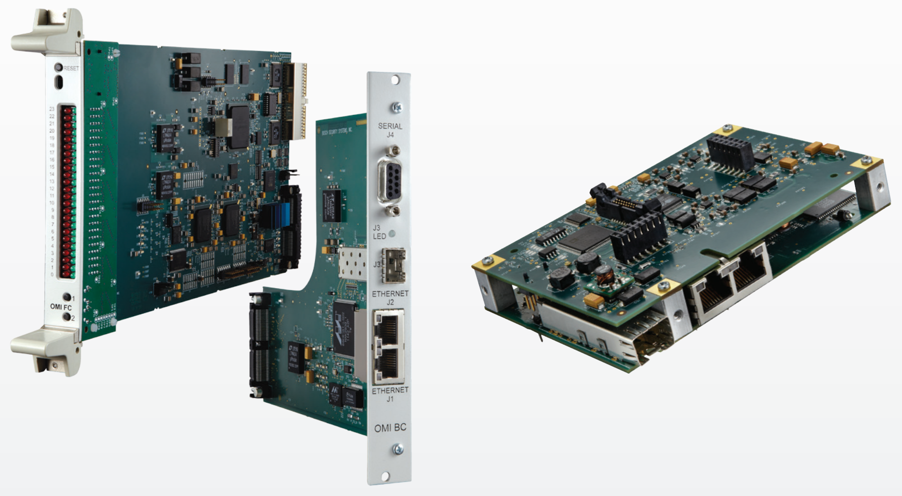
With RTS+OMNEO, such essential tasks as deploying intercom user stations, linking via trunking and interfacing to third-party devices has now become easier and more flexible. The addition of ADAM OMNEO cards to any compatible ADAM system means even existing installations can be networked over standard IP hardware with high-quality, ultra-low-latency audio.

The product range consists of the ADAM OMNEO card for the ADAM and ADAM-M intercom frames and a user station interface card for select RTS keypanel models. Both these cards fully update the connectivity of these RTS intercom products to be fully IP compatible.

Specification Table

	OMI ADAM Matrix Card	OKI Keypanel Interface Card
Supporting Products	ADAM, ADAM-M	KP-32, KP 32 CLD, RP-1000, KP 12 CLD
Connections	(2) RJ45 Ethernet Connections (1) LC Type SFP Fiber Connector	
Audio I/O Levels	N/A. See note below*	Input/Output (maximum level): +20 dBu Input/Output (nominal level): +8 dBu
Frequency Response (Input)	within ±1 dB from 20 Hz–20 kHz	
THD+N @ 1 kHz	better than 0.01% @ 8 dB	–
Network Delay	<20 ms typical	
Storage Temperature	–40℉ to 158℉ (–40℃ to 70℃)	KP 12 CLD / KP 32 CLD / RP-1000: –40℉ to 158℉ (–40℃ to 70℃) KP-32: –40℉ to 140℉ (–40℃ to 60℃)
Operating Temperature	32℉ to 122℉ (0℃ to 50℃)	KP 12 CLD / KP 32 CLD / RP-1000: 5℉ to 122℉ (–15℃ to 50℃) KP-32: 14℉ to 105.8℉ (–10℃ to 41℃)
Power Consumption	14.9 W @ 5 V (Front and Back combined)	KP 12 CLD / KP 32 CLD / RP-1000 without Fiber: 5 watts KP 12 CLD / KP 32 CLD / RP-1000 with Fiber: 5.75 watts KP-32 without Fiber: 5.5 watts KP-32 with Fiber: 6.25 watts
Weight	Front Card: 0.65 lb (0.29 kg) Back Card: 0.30 lb (0.14 kg)	4.15 oz (card only)
Card Dimensions (W x D x H)	Front Card: 0.8" x 12.7" x 6.8" (21.04 cm x 322.40 cm x 173.11 cm) Back Card: 0.8" x 6.8" x 6.8" (20.0 cm x 172.56 cm x 172.26 cm)	4.5" x 3.0" x 1.1" (29.03 cm x 19.35 cm x 7.10 cm)

*OMI card is a digital board with build-in audio mixer for 64 inputs. The audio I/O levels are specific to analog sources such as AIO-16 or keypanel.



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