Vocality RoIP provides users with a simple to use, small form factor radio connectivity solution unlike any other on the market today.

4G LTE AND WI-FI (OPTIONALLY BUILT-IN)
Vocality RoIP supports an extensive range of connectivity options with a choice of Ethernet, 4G LTE or Wi-Fi bearers, that can be built directly into the device.

SUPPORT FOR MULTIPLE RADIO DEVICES
Radio devices from different manufacturers can be part of a single radio system, providing a unified network regardless of radio brand, frequency or technology.

SERIAL PORTS FOR RADIO CONTROL
Four serial ports are available on each Vocality RoIP, allowing for programming and control of up to four disparate radio systems.

INTEGRATE WITH RADIO DISPATCH SYSTEMS
As part of an emergency response solution, Vocality RoIP can be easily integrated with many of the leading radio dispatch systems including Motorola Solutions WAVE.

INTEGRATED RADIO DISPATCH
Dispatch is a fully integrated, simple to use and cost-effective dispatch module for use on Vocality RoIP. The module allows operators to easily manage radio talk groups anywhere within the Vocality connected network.*

SMART NETWORK MANAGEMENT
Multi-bearer is a smart rules-based software module that manages network connectivity on the Vocality RoIP. The module automatically selects the most suitable bearer based on availability and user-priorities with little or no impact on the user.*

EXTEND RADIO NETWORK RANGE
Radio networks can be easily extended across multiple sites or campuses to transmit and receive radio traffic. Broadcasters clean feed or talk-back services can also be extended back to trucks over cellular and satellite links.

*Separate software license may be required
Preliminary Technical Data

MECHANICAL

Form Factor: Standalone enclosure
Cooling: Conduction by internal Heat Spreader to case
Operating Conditions: boxed* -40degC to +80degC ambient 0-90%RH non-condensing
Note: If the optional power supply (Vocality RoIP/PSU) is used, this range will be reduced to 0 to 40degC.
Shock and Vibration: TBC
MTBF: >175,000hours at 70degC
Dimensions: 4.41 x 4.47 x 1.08in / 112 x 113.5 x 27.5mm
Indicators: 4 tri-color audio channel status LEDs, 2 port status LEDs per Ethernet port, 1 tricolor status LED
Weight: 0.66lb / 0.3kg

Electrical:
Supply Input Rating: 5V to +35V DC +/-10%
Supplies rated between 5V and 12V, max current 6A, Supplies rated between 12V to 35V, max current 1A
Consumption(typ): 5W (typ)
Mains Adaptor: 100-240V AC @ 2A, 50-60Hz (Output 12V DC@6A)
PoE Powered Device: Device may be powered over Ethernet, 802.3af Class 0 Device

Connectors:
DC Power: 3-way locking Power Connector
ETH1, ETH2 Ethernets: 2 x 8-way RJ45
Analog Audio Ports: 4 x 8-way RJ45
Quad Serial & Radio Auxiliary I/O: 26-way High-density D-Type female
USB: 1xUSB 2.0 Type A (support for LTE and Wi-Fi devices)
Example compatible 4G LTE dongles: US (AT&T) Sierra AirCard 313u and AirCard 340u,
Europe (unlocked) Huawei E3372 and E398 (specifically E398u-15 for UK LTE bands)
Internal Expansion Slot: Mini-PCIe for LTE or Wi-Fi modules, with external SMA connectors and SIM card slot
Part number: 68664/RP/1 Vocality RoIP Retail Pack 1 Port
68664/LTEA/RA/1 Vocality RoIP Retail Pack 1 Port with internal LTE(NA) module for US use with AT&T
68664/LTENAV/RA/1 Vocality RoIP Retail Pack 1 Port with internal LTE(NAV) module for US use with Verizon
68664/LTEANZ/RA/1 Vocality RoIP Retail Pack 1 Port with internal LTE(ANZ) module for Australia and New Zealand use
68664/LTEEU/RA/1 Vocality RoIP Retail Pack 1 Port with internal LTE(EU) module for European use

FUNCTIONAL — COMMON TO ALL FORM FACTORS

Quad Serial Ports: V.24/RS232 serial
Format: Async up to 115200bps, configurable data bits, parity, stop bits
10/100/1000base-T Ethernet Ports: 2
Presentation: Auto-MDIX
Formats: IEEE 802.3i(10base-T), IEEE 802.3u(100base-TX), IEEE 802.3ab(1000base-T)
Basic Protocol Support: DNS Client, DHCP Client, Telnet, SSH
RoIP Protocol Support: Unicast RTP, Multicast RTP, SIP UA
Functionality: Enhance, Secure, Multi-bearer and Dispatch optional modules available
RTP Packet Sampling Rates: AUTO
Audio 4-wire Ports: 1 standard (expandable to 4 by Feature Key)
Interfaces:
4-wire activation with COR/PTT. Gain adjustment range +8.75 to -34dBm and DC bias for direct microphone connection
Compression:
G.723.1 (5.3/6.3kbps MP-MLQ), G.729 Annex A (8kbps CS-ACELP), G.711 (64kbps PCM) µ-law or A-law,
OPUS variable bit rate codec including HD voice
Impedance: O/P 600 ohms, I/P high/600ohms
Max Input Level (1kHz): 6.0V pk-pk (TBC)
Max Output Level (1kHz): 7.1V pk-pk (TBC)
Input-Output Gain (1kHz): +1.36dB unterminated (TBC)
COR activation range: +0.8 to -48V relative to chassis
Passband Flatness: +/- 0.5dB (300-3300Hz) (TBC)
Maximum PTT voltage: -24V to +60V relative to GND (TBC)
Maximum PTT current: +/- 120mA (TBC)
Activation: COR/PTT, Vox, EIA, Permanent
Coding delay: Per algorithm
Gain: ±31dB programmable in 1dB
Radio Auxiliary I/O: 6 general purpose programmable I/O signals

* When the equipment is adequately protected from direct user contact, the equipment will reliably operate with an ambient temperature within the specified range.
Vocality RoIP is a product under continuous development.
Please be advised that Secure module licenses will be subject to UK dual-use export control restrictions.

Cubic Mission Solutions
Lydling Barn, Lydling Farm, Puttenham Lane
Shackleton, Surrey GU8 6AP United Kingdom
Tel +44 1483 813 130 Fax +44 1483 813 131
E-mail: sales@vocality.com
www.vocality.com

Cubic Mission Solutions
21580 Beaumeade Circle, Suite 230
Ashburn VA 20147 United States
Tel (703) 787 9133 Fax (703) 787 9136
E-mail: sales-usa@vocality.com
follow us on twitter @vocality