

## ORCA® RDT-8g & RDT-8v



ORCA RDT-8

Nuera's ORCA RDT-8g (GR-303) and RDT-8v (V5.2) are the premier carrier-class gateways for broadband integrated voice and data services over cable, fiber, copper and fixed-wireless networks. The RDT-8 is PacketCable compliant and is ideal for cable telephony applications.

### Open, Reliable Communications Architecture

The ORCA product family is Nuera's new breed of carrier-class IP telephony solutions. ORCA brings Nuera's call and voice processing expertise to a new level of capacity and availability, paving the way for the global IP telephony network. From broadband access to thin-route international long distance, Nuera's ORCA product family provides the highest-performance solutions for the most demanding networks.

### Carrier-class Service

The RDT-8 delivers all of the services offered by the Class 5 switch over the PacketCable IP infrastructure. All of the critical voice services and capabilities such as fully transparent fax and modem support, caller ID, billing and emergency 911 are delivered seamlessly.

### Interoperability

The RDT-8's telephony interfaces are certified interoperable with Lucent, Nortel, Alcatel, NEC, Nokia and other Class 5 local exchange switches. The RDT-8 is also certified interoperable with customer premises access equipment (IADs, MTAs and EMTAs) from Tellabs, Motorola, Arris and many others.

### Voice and Call Processing

Dynamic jitter buffers, adaptive echo cancellation, silence suppression, lost packet recovery and DiffServ packet priority features enable the gateway to provide the highest quality service under the most demanding network conditions. The RDT-8 has a fully redundant embedded softswitch used for establishing and managing the calls between itself and the MTAs.

### Capacity and Performance

The RDT-8 supports up to 380 (480 with V5.2) simultaneous voice, modem or fax calls per chassis and supports up to 4,000 subscriber lines. The RDT-8 supports a busy hour call attempt (BHCA) rate of 19,200 (40 BHCA per DSO). End-to-end delay is less than 37 ms.

### Standards Compliance

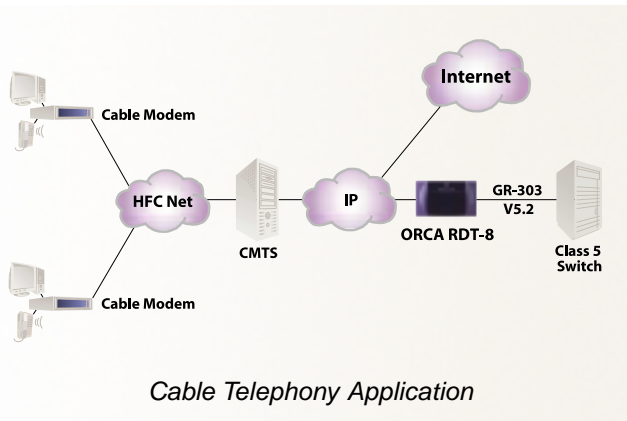
The RDT-8 supports G.168 compliant echo cancellation, PacketCable NCS profile of MGCP and is GR-303, V5.2 and Bellcore NEBS level 3 compliant.

### Reliability

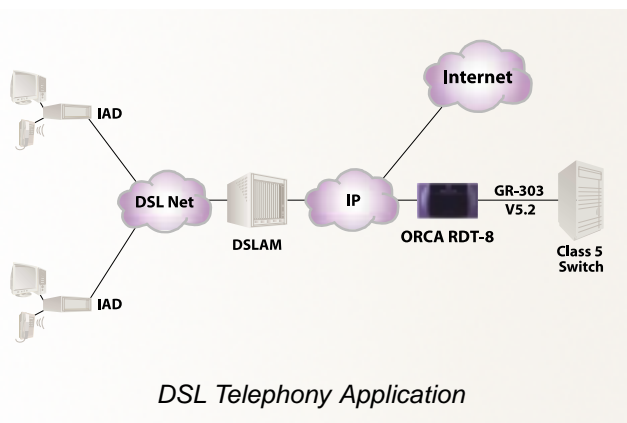
Built for carrier networks, all common logic, power supplies and fans are redundant and hot-swappable. In addition, the GR-303/V5.2 signaling channels are redundant.

### Element Management

NueraView operates with the HP OpenView SNMP element manager which facilitates provisioning of interface groups, voice ports and subscribers. NueraView is easy to use with its graphic point-and-click configurator and dynamic status screens.



Cable Telephony Application



DSL Telephony Application

### Provisioning Tool

Automatically provisions subscribers by downloading a file created by any text editor, database or spreadsheet. A provisioning audit trail is generated and shows a detailed transaction history, including any detected errors.

# ORCA<sup>®</sup> RDT-8



73.5 inches  
(186.69 cm)

ORCA RDT-8  
rack view

## ORCA RDT-8 Specifications

### Voice Interfaces

Signaling	GR-303, ETSI V5.2, NCS
Electrical	T1, E1
Physical	RJ-45, BNC, DB25
Interface Groups/Bundles	4

### Packet Data Interfaces

WAN	100Base-T
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### Vocoders

G.711	64 kbps
G.726	32 kbps
Fax	Group III (up to 14.4 kbps) Super G3 (up to 33.6 kbps)
Modem	V.32, V.34, V.90
Echo Cancellation	G.168, 0-54 msec

### Element Management

RDT-8	SNMP Embedded Agent
Manager Application	NueraView GUI with HP OpenView on Microsoft Windows NT, 2000

### Chassis

Capacity	16 T1/E1 (112 T1/E1 per rack)
Redundancy	Control Module, Hub Module, Power Supplies, Fans

### Environment

AC Inputs	90-125 VAC, 13 Amps or 180-250 VAC, 6.5 Amps Autoranging, 47-63 Hz
DC Inputs	(-40)-(-60) VDC, 9.5 Amps
Size	10.5" (26.67 cm) H, 17.5" (44.5 cm) W, 14.25" (36.2 cm) D
Weight	60 lbs (27.75 kg)
Storage	-20 to 80°C
Operating	0 to 50°C