



ARCA-DACS™ 100

ZHONE TECHNOLOGIES' ARCA-DACS™ 100 OFFERS SERVICE PROVIDERS THE ABILITY TO ECONOMICALLY ENHANCE NEW AND EXISTING TDM ACCESS NETWORKS

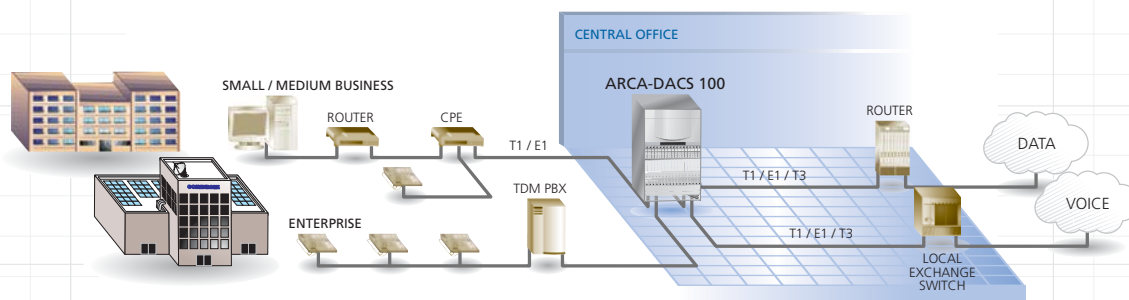
OPTIMIZE THE ACCESS NETWORK

- Effective, efficient, economical
- 3/1/0 digital cross-connect at the network edge
- Integrated DSO-level grooming
- Network management simplicity and metallic test access
- Carrier-class reliability
- International digital cross-connect capability
- ANSI (North America) / ITU signaling conversion (for example, E1 to/from DS3)

SAVING SERVICE PROVIDERS MONEY

Service providers in today's telecommunications market are well aware of the high price of inefficient transport. Any improvement in efficiency, be it in bandwidth or manual effort, adds significant savings to the bottom line. By optimizing bandwidth where traffic begins—in the access network—the ARCA-DACS 100 helps enhance efficiency to better improve the bottom line.

The ARCA-DACS 100 is a small foot print DACS that is ideally suited for grooming access networks. Its effectiveness, efficiency, and economy make the ARCA-DACS 100 a vital addition to today's TDM-based networks.



3/1/0 CROSS-CONNECT

Traditionally, each subscriber required a nailed-up circuit across the network, i.e., a point-to-point connection. The introduction of digital cross-connects subsequently allowed service providers to switch traffic from trunk to trunk. These cross-connects were typically 3/1 or 1/0 devices. With the introduction of the ARCA-DACS 100, providers can now choose switching granularity from DS3-based down to DS0-based all in one effective, efficient, and economical platform. E1 digital cross-connect is also supported for ITU TDM applications.

EFFECTIVE

In many existing telecommunications infrastructures, cost concerns mandate that DACS capabilities be located towards the central part of the network. But bandwidth at the edge is now readily available in today's changing communications network. With the **ARCA-DACS 100**, traditional cross-connect functionality can now be cost-effectively deployed in a distributed manner.

EFFICIENT

The **ARCA-DACS 100** allows carriers to efficiently leverage existing infrastructure and personnel by providing a reliable, standards-based edge DACS for grooming voice and data traffic before it hits the transport network. The **ARCA-DACS 100** grooms traffic at all levels of granularity to allow for more efficient use of backhaul SONET transport, multiplexers, 3/1/0 DACS ports, and switch ports for partially filled (fractional) T1/E1 applications. It also grooms voice and data traffic for integrated T1/E1 applications that combine voice and data on a single T1/E1.

RELIABLE

The **ARCA-DACS 100** is completely NEBS level 3 compliant, meeting all of the requirements for installation in a central office, remote node, or subscriber site. Redundancy is built into all aspects of the **ARCA-DACS 100**'s hardware and software with no single point of failure. Additionally, metallic test capabilities provide carriers the opportunity to diagnose line problems without disrupting service. Support for GR-818 / GR-834 enables interworking with industry-standard 3rd-party test controllers for comprehensive test and performance monitoring. Combined with remote software configuration and centralized management tools, the **ARCA-DACS 100** plays an essential part in optimizing the burgeoning expanse of today's TDM networks.

TECHNICAL SPECIFICATIONS

Physical Specifications

- Dimensions: 22 3/4 in. X 17 1/2 in. X 10 in. (HWD)
- Shipping Weight: 20.7 lbs
- Total Slots: 34 (17 upper and 17 lower)
- Rack Mountable (19 in. or 23 in. width)

Power

- Feed: Dual DC Power
- DC: -36.5V to -56.5V
- Separate A/B Power Feeds for DC Protection
- Power Dissipation: 288 Watts (Fan cooled)

Environmental

- Operating Temperature Range: 32° F to 122° F (0° C to +50° C)
- Operating Relative Humidity: 5% to 85% Non-condensing

Interface Specifications

- 264 FXS POTS capacity
- 264 FXO POTS capacity
- 100 T1 capacity (DSX/CSU)
- 72 E1 capacity
- 12 DS3 capacity
- 12 STS1 capacity
- 12 E3 capacity
- 1:1 single mode STM1 (linear APS)
- 3/1/0 Cross-Connect (2400 X 2400 DSO non-blocking)
- M13 Capability
- AMI/B8ZS Line Coding
- D4, ESF, SLC-96 (TR-08) Frame Formatting (User Configurable)

Clock Interfaces

- Primary and Secondary System Clock Sources
- Internal Stratum 3
 - BITS A, BITS B (1.544 Mb/s, 2.048 Mb/s)
 - External Line (T1, E1, DS3)
 - ITU-T G.703 2 MHz synchronization interface

Management and Test

- VT-100 Local Management via RS232
- Telnet Support via Ethernet
- Software Download Capability via TFTP
- GUI-based CMT (Configuration Mgmt Tool)
- TL1-based CLI
- SNMP Managed
- GR-818 and GR-834 for interworking with 3rd-party test controllers
- G.774 Management Information Model
- GR-1250 File Transfer

Standards Compliance

- Safety: UL 1950 3rd Edition, CSA 22.2 No. 950, EN 60950, AS/NZS 3260
- Emissions: FCC Part 15 Class A, GR-1089-Core Level 3, EN 55022A Immunity: GR-1089-Core Level 3, EN 55024, EN 50082
- Environmental: GR-63-Core Level 3, ETS 300 019-2-x, ISTA Transportation and Handling
- Network Certification: FCC Part 68, CTR-12, CTR-13, DOC CS-03, NTR-4, TSO 16



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About Zhone Technologies, Inc. (Zhone)

Zhone's strategy combines existing solutions with Zhone's internally developed intellectual property to create a portfolio of scalable next-generation network products supporting a rich array of voice, data, video, and entertainment services. Zhone's advanced networking solutions include the Single Line Multi-Service (SLMS™) architecture, Broadband Access Node (BAN™), Zhone Management System (ZMS™), Sector™ universal voice gateway, Arca-DACS™ digital cross-connect, and Z-Plex™ and Z-Edge™ access products. For more information about Zhone and its products, please visit the Zhone Web site at www.Zhone.com or e-mail info@Zhone.com. Zhone, the Zhone logo and all Zhone product names are trademarks of Zhone Technologies, Inc. Other brand and product names are trademarks of their respective holders. Specifications, products and/or product names are all subject to change without notice. Copyright 2002 Zhone Technologies, Inc. All rights reserved.