



ARCA-DACS™ 100

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

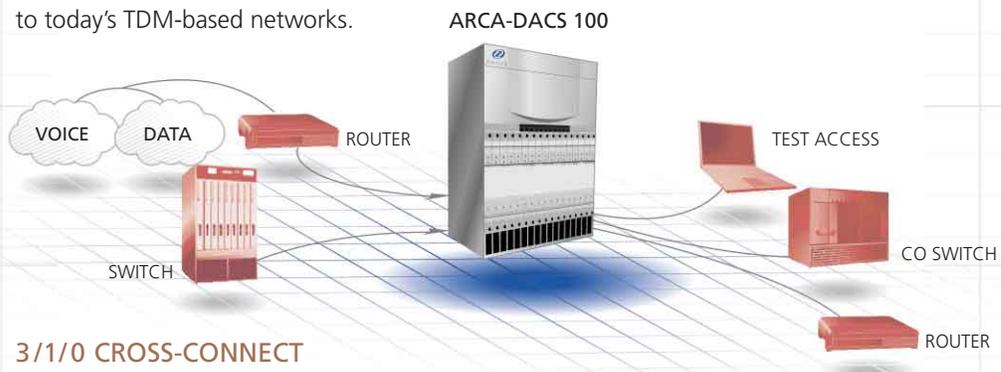
OPTIMIZE THE ACCESS NETWORK

- 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
- Domestic/International signaling conversion (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 DS0 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 international 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. Deploying the **ARCA-DACS 100** at the edge of the network ensures better facility utilization by permitting network providers to transport only valid traffic-bearing circuits. The **ARCA-DACS 100** grooms DS3s, DS1s, and DS0s to allow for more efficient use of backhaul SONET transport, multiplexers, 3/1/0 DACS ports, and switch ports for partially filled (fractional) T1 applications. It also grooms voice and data traffic for integrated T1 applications that combine voice and data on a single T1.

ECONOMICAL

By reducing both backhaul transport costs and port requirements on costly high-end switches, the **ARCA-DACS 100** provides an economical method for taking advantage of existing infrastructures with greater subscriber capacities.

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. 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.

TDM Specifications

- 100 T1 capacity (DSX/CSU)
- 72 E1 capacity
- 12 DS3 Interfaces
- 3/1/0 Cross-Connect (2400 X 2400 DSO non-blocking)
- M13 Capability
- AMI/B8ZS Line Coding
- D4, ESF, SLC-96 (TR08) Frame Formatting (User Configurable)

Configuration and Management

- VT-100 Local Management via RS232
- Telnet Support via Ethernet
- Software Download Capability via TFTP
- GUI based CMT (Configuration Mgmt Tool)
- SNMP traps supported for all system alarms

Chassis

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

Clock Interfaces

- Primary and Secondary System Clock Sources
- Internal Stratum 3
 - BITS A, BITS B (1.544 Mb/s)
 - External Line (T1, E1, DS3)

Environmental Operating Requirements

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

Power

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

Safety Standards Compliance

North America

- GR-63-Core Physical Protection
- GR-1089-Core EMC and Safety
- FCC Part 15-Class A, FCC Part 68, DOC CSO3 Regulatory
- UL 1950 3rd Edition
- CSA C22.2 No. 950-M95

International

- EN 55022A Radiated and Conducted emissions, EN 60950 Safety, EN 50082 Immunity
- IEC 61000-4-x Electrical Discharge, Radiated Electrical Field, Electrical Fast Transient/Burst, Surge, Conducted Disturbance
- EN 55024 Telecom Port Surge
- ETS 300 019-2-x Storage Environment, Transportation Environment, Operational Use
- ISTA Transportation and Handling
- CTR 13 E1 Structured
- NTR 4



Z H O N E™

Zhone Technologies, Inc.

@ Zhone Way
7001 Oakport Street
Oakland, CA 94621
510.777.7000 phone
www.zhone.com

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 2000 Zhone Technologies, Inc. All rights reserved.