



### Compact Digital Access Cross Connect System

The Arcadac 100 is a compact DACS that is ideally suited for grooming access networks. Its small footprint, network efficiency and reduced price point make the Arcadac 100 a valuable addition to today's TDM-based networks.

Service providers in today's telecommunications market are keenly aware of the high price of inefficient transport. By optimizing bandwidth where traffic originates - in the access network - the Arcadac 100 helps enhance efficiency to improve the bottom line.

Previously, each subscriber required a point-to-point connection across the network, however, 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 Arcadac 100, providers can now choose switching granularity from DS3 to DSO-based platforms. E1 digital cross connects are also supported for international TDM applications.

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 Arcadac 100, traditional cross-connect functionality can now be cost-effectively deployed in a distributed manner.

As an extension to a voice switch, the Arcadac 100 uses standard GR-303 signaling to concentrate voice traffic. It can dynamically assign approximately 4,100 individual calls or DSOs to a local exchange digital switch on a call-by-call basis. Not only does this capability allow you to leverage existing GR-303 signaling, but it also allows you to transparently offer full lifeline and CLASS services to your subscribers.

The Arcadac 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 arrives at the transport network. Deploying the Arcadac 100 at the network edge ensures better facility utilization by permitting network providers to transport only valid traffic-bearing circuits.

The Arcadac 100 grooms DS3s, DS1s, and DSOs 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.

By reducing both backhaul transport costs and port requirements on costly high end switches, the Arcadac 100 provides a cost effective platform to leverage existing infrastructures with greater subscriber capacities. The Arcadac 100 is completely NEBS level 3 compliant, meeting all of the critical requirements to install in a central office, remote node, or subscriber site. Redundancy is built into all aspects of Arcadac 100 hardware and software with no single point-of failure.

Additionally, metallic test capabilities provide carriers the ability to diagnose line problems without disrupting service. Combined with remote software configuration and centralized management tools, the Arcadac 100 plays a key role in optimizing today's TDM networks.

#### Features and benefits

- 3/1/0 digital cross connect at the network edge
- Integrated DSO-level grooming
- Simplified network management and metallic test access
- Carrier class reliability
- International digital cross-connect capability
- Supports multiple DS3 and GR-303 Interface Groups
- Concentrates voice traffic using GR-303
- Domestic and international signaling conversion (E1 to DS3)

#### It's easy to learn more

To learn more about the Arcadac 100 and how it can benefit your company, call, email, or visit us online today.

**Toll-free: +1.866.829.8776 (U.S. and Canada only)**

**Outside the U.S. and Canada: +1.678.589.3653**

**E-mail: [marketing@verso.com](mailto:marketing@verso.com)**

**[www.verso.com](http://www.verso.com)**

# Verso Arcadac 100

## Description

- Arcadac 100 - 3/1/0 Narrow Band Digital Cross Connect System

## TDM Specifications

- 100 T1 capacity (DSX/CSU)
- 72 E1 capacity
- 12 DS3 Interfaces
- Nortel and Lucent GR-303 Certification
- Multiple GR-303 Interface Groups
- 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% noncondensing

## 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)

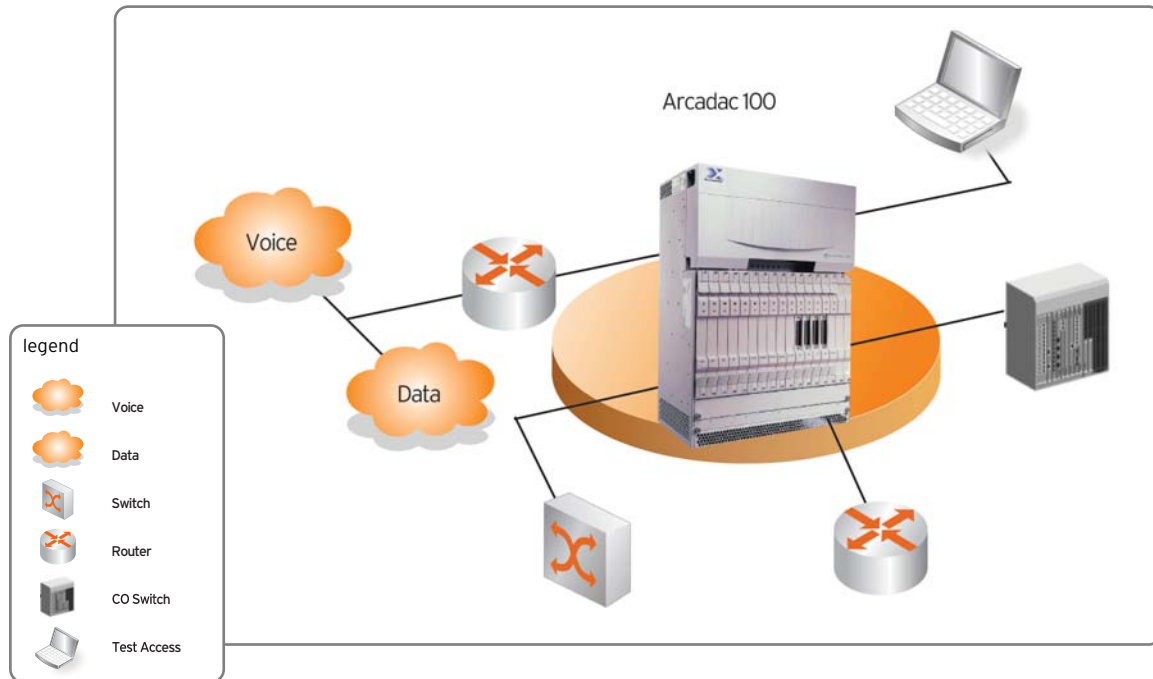
## Safety Standards Compliance

### North America

- GR-63-Core Physical Protection
- GR-1089-Core EMC and Safety
- FCC Part 15-Class A, FCC Part 68,DOC CS03 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



**VERSO**  
TECHNOLOGIES

**Worldwide Headquarters:** Verso Technologies • 400 Galleria Parkway • Suite 200 • Atlanta, GA USA 30339

Tel: +1.678.589.3653 • Toll-Free 1.866.829.8776 • E-mail: [marketing@verso.com](mailto:marketing@verso.com) • [www.verso.com](http://www.verso.com)

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