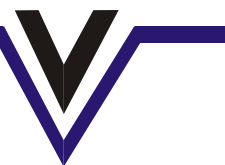


VALIANT COMMUNICATIONS LIMITED



VCL-MegaConnect - 72 Port T1 Digital Access Cross Connect Switch (DACCS)

Product Brochure & Data Sheet

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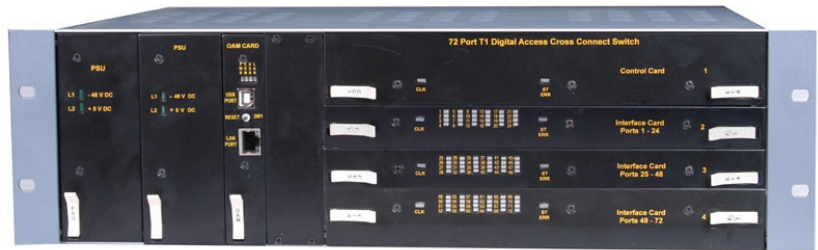
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Introduction

The VCL-MegaConnect - 72 Port T1 DACS is a T1 digital cross-connect switch which presents its user an easy to use platform to cross-connect at the 64Kbps (DS-0) time-slot , level between the 72 T1 ports.



VCL-MegaConnect - 72 Port T1 DACS

The VCL-MegaConnect - 72 Port T1 DACS offers full cross-connect functionality to cross-connect between DS-0s, “n”x64Kbps consecutive DS-0s and Fractional T1 channels to full T1 channels.

The VCL-MegaConnect - 72 Port T1 DACS occupies only a 3U high rack-space and is a complete 19-inch stand-alone unit that may be used to cross-connect between the 72 T1 ports. The unit offers 1+1 -48V DC power supply redundancy.

The system supports a CLI text-based, menu as well as an easy-to-use Graphical User interface (GUI) that offers the user complete control to prepare multiple configuration maps (and store / save them as data files) for the ease of downloading them from a PC. Dry contact relay alarm is also available at rear of the system to connect the system to an external alarm / audio buzzer.

The VCL-MegaConnect - 72 Port T1 DACS also has a TCP/IP Access port which allows the DACS to be connected on a TCP/IP network (10/100BaseT ethernet) for remote access for configuration and monitoring. The system also supports SNMP V2 monitoring / trap capability.

Applications

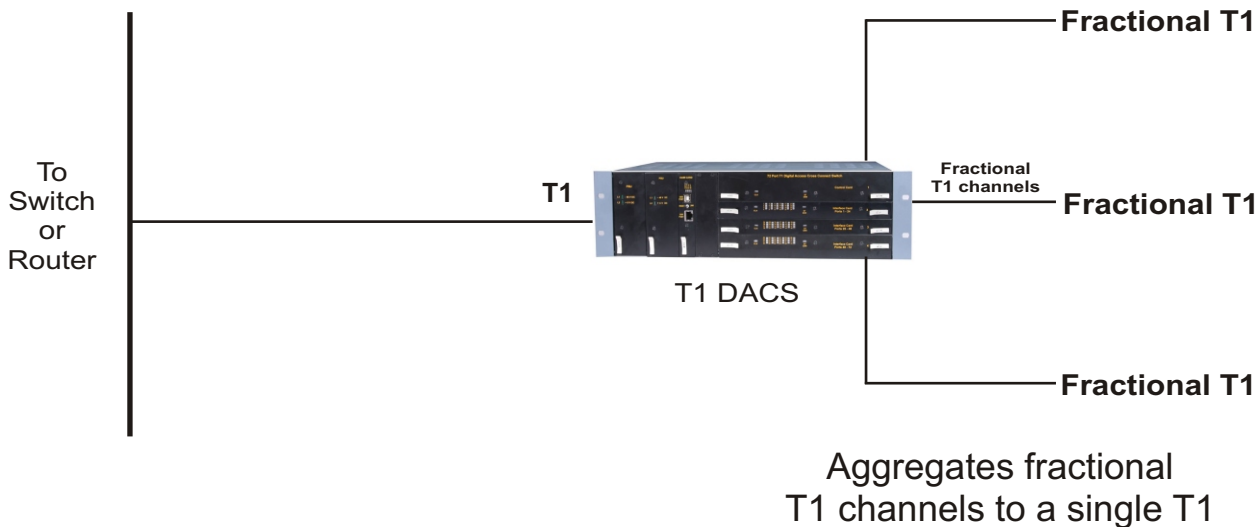
- Providing fractional T1s
- Data aggregation from fractional T1 channels
- Cellular extending fractional T1 ports from MTSO to cell-sites
- Cross connecting DS-0 time-slots between T1 ports

Highlights

- Stratum 3 Internal clock
- Remote TCP/IP access for configuration and monitoring
- Text based user friendly CLI for easy configuration
- Telnet
- Graphical User Interface (GUI)
- Compact. Available in 72 T1 ports configuration
- SNMP V2 Monitoring / Traps

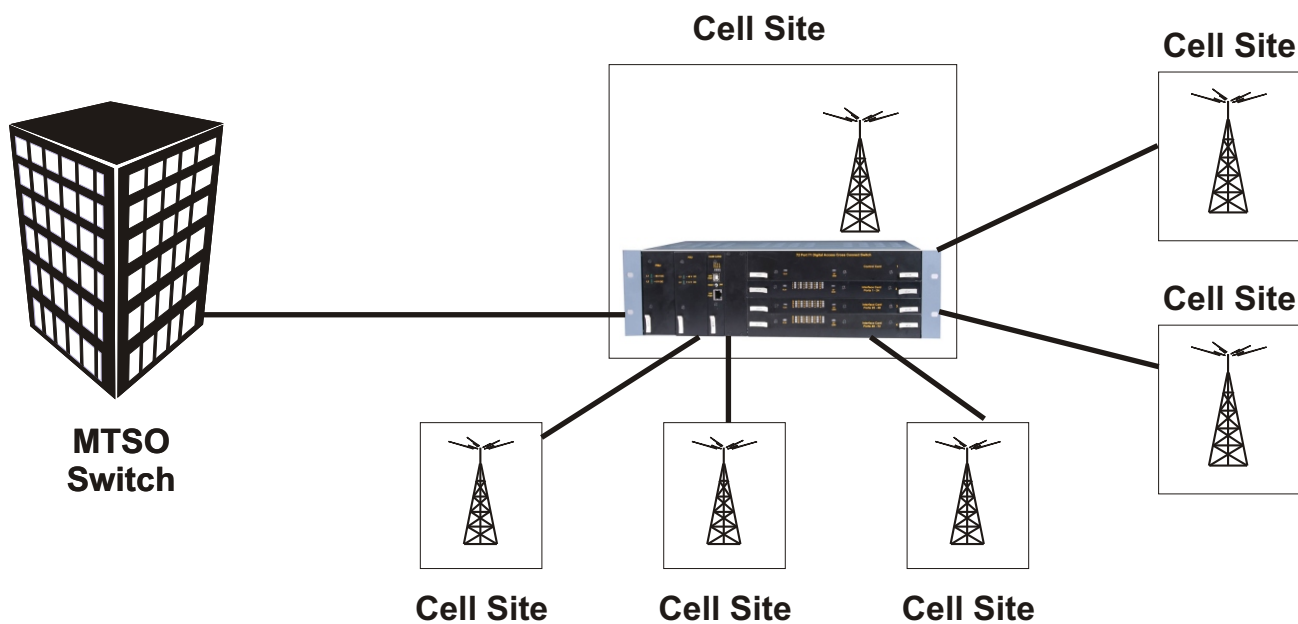
①

ISP Digital Cross Connect Application providing fractional T1s' to subscribers



②

Backhaul-Cellular Application using T1-DACS



Features

- Provides DS0, "n"x64Kbps and fractional T1 grooming for up to 72 T1 ports
- Rear access
- User friendly CLI (text-based) commands
- Telnet
- Easy to install
- LED Indications on the front panel for alarms and status
- USB (Serial) and RS232 (Serial) interfaces for local access
- 10/100BaseT (Ethernet) interface for remote access.

Benefits

- Reduce access costs by combining partially loaded T1s to a single T1
- Rear access wiring improves wiring and cable management
- Support Nx64kbps fractional T1 operation and grooming
- Easy to install and simple to use

VCL-MegaConnect - 72 Port T1 DACS

Shelf Description

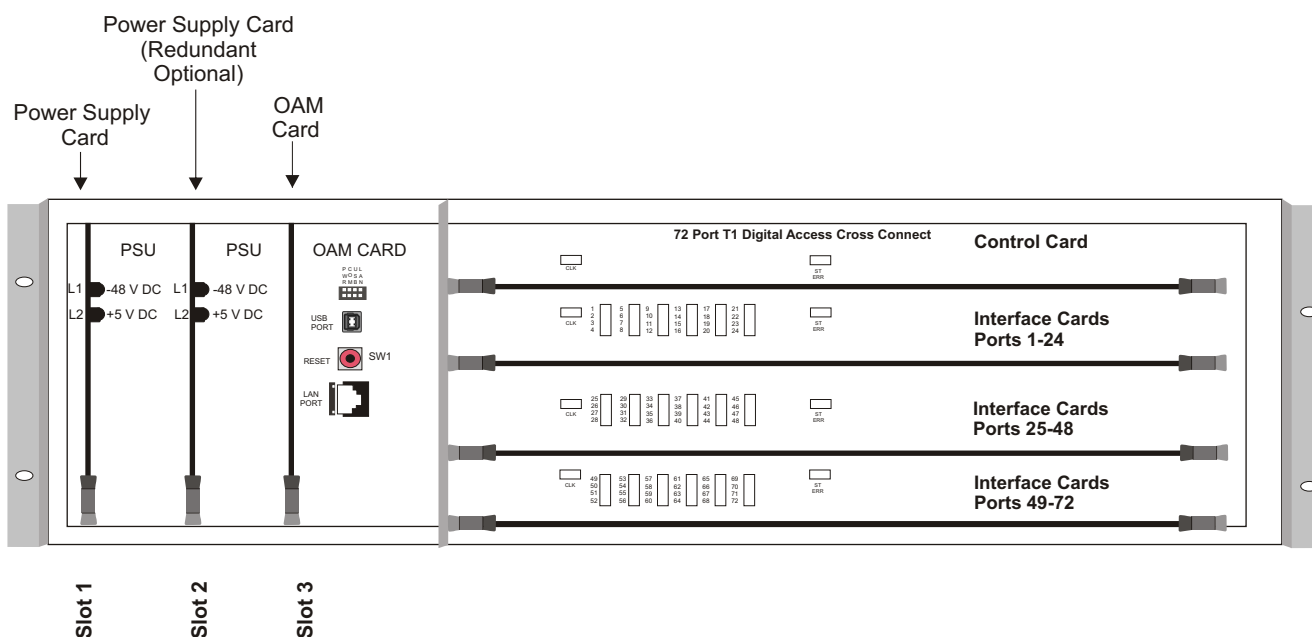
3U high standalone system

The VCL-MegaConnect - 72 Port T1 DACS unit is a 3U, 19 Inch Shelf, fitted with a backplane that provides rear access of all external interfaces.

USB Serial Port, TCP/IP Management Port and all LED indicators are provided on the front panel of the system.

VCL-MegaConnect - 72 Port T1 DACS

Front View of the Shelf



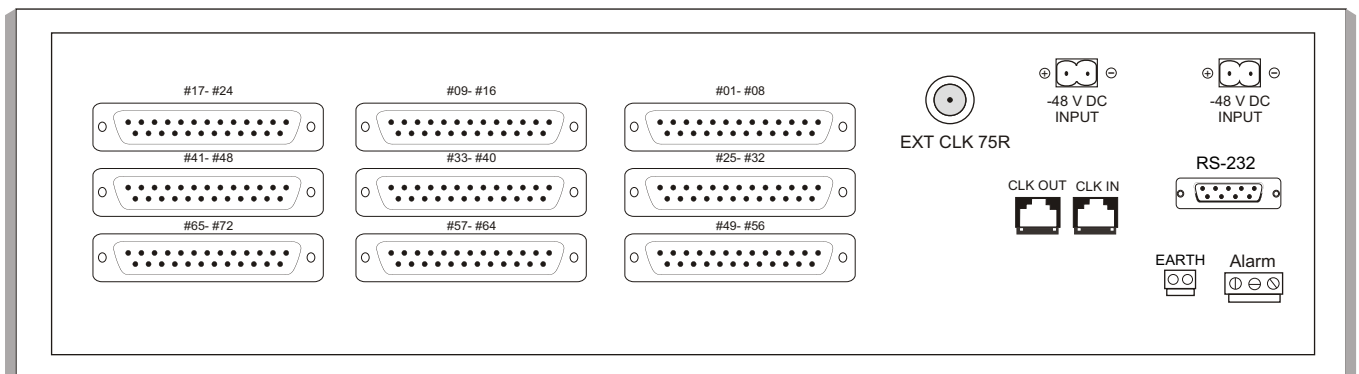
Accessing VCL-MegaConnect - 72 Port T1 DACS Standalone Shelf

The 1.5 Mbps T1 electrical I/Os, Dual -48V DC power input, alarm extension, RS232 Management Port, External 75 Ohms TTL and 120 Ohms Bits Clock input connections all accessed at the rear of the shelf.

The backplane consists of nine DB-37 connectors and each connector provides 8 T1 interfaces i.e. Total 72 T1s.

VCL-MegaConnect - 72 Port T1 DACS

Back view of shelf



VCL-MegaConnect - 72 Port T1 DACS offers programming via an RS232 Port, USB Serial Port and 10/100BaseT LAN Port for control and monitoring of the unit.

Programming Features

- Specifying the clock priority sequence for the synchronization
- Enabling or disabling 1.5Mbps T1 Ports and masking the T1 Ports that are not in use
- Creating a cross-connect between T1s at DS-O level (single time-slot level) using the easy-to-use CLI (text-based) commands or a Graphical User Interface (GUI) software.

Status Monitoring

- Synchronization Clock Selection
- Status of alarms
- Enabled/Disabled status of 1.5Mbps T1 ports
- Monitoring of the VCL-MegaConnect - 72 Port T1 DACS status and configuration

Alarm status and monitoring

- Loss of incoming signal at all 1.5 Mbps T1 Ports
- Configuration error alarm

In addition to the above monitoring facilities, VCL-MegaConnect - 72 Port T1 DACS is provided with LEDs, which indicate various fault conditions.

Monitoring VCL-MegaConnect - 72 Port T1 DACS via LED indications

- 1 to 72 T1 Ports LED indicators
- 3 V DC present
- -48 V DC present
- Configuration error

Technical Specifications - T1 Interface:

Number of T1 Ports	72
Line Rate	T1 (1.544 Mbps \pm 50 bps)
Available Time-Slots per T1	1-24
Framing Options	D4, ESF (User programmable)
Line Coding	AMI, B8ZS (User programmable)
Electrical	ITU-T G.703
Jitter	ITU-T G.823, ITU-T 1.431
Impedance	100 Ohms
Connector Type	DB-37 (Female)
Number of DB-37 connectors	9 (8T1s per connector)

Time-slot selection / cross-connect:

Any time-slot to any time-slot, through an internal, best byte, non-blocking TSI switch.

Synchronization Clock Options

Internal	(Stratum 3 level)
Loop-timed	From any T1 Port (with automatic fallback)
External	75 Ohms - 2MHz TTL External Clock 120 Ohms - 2Mbps Bits Clock

System Management and Access

Windows XP and Windows 7 compatible GUI
Telnet - CLI (Command Line Interface)
SNMP V2 (MIB File provided with the equipment).

Management and Control Ports

Serial Management Port (RS232) - COM Port
USB Serial Interface - COM Port
10/100BaseT for remote management over a LAN / TCP-IP network.

Command Language

Command Line Interface (English text commands) - HyperTerminal or Telnet
Windows based GUI.

Compliance

Meets CE requirements
Complies with FCC, Part 68 and Part 15 sub part A specifications
Safety - UL 1459 Issue 2.

Alarm contact closures

1 Alarm relay Type - form "C".

Temperature

Operating	0°C to 50°C
Humidity	5% to 95% Non-condensing

Power consumption

Power consumption	30 Watts Max.
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Mechanical Specifications

Rack Mounting	Standard 19 Inch. DIN Rack
Height	132.00 mm (3U)
Depth	290.00 mm
Width	485.00 mm
Weight	6.20 kg.

Ordering Information

VCL-MegaConnect - 72 Port T1 DACS			
S.No.	Part No.	Product Description	Qty
1.	VCL-1461-72T1	VCL-MegaConnect - 72 Port T1 Digital Access Cross Connect Switch (DACs) 19 inch 3U Rack Mount Version with 1+1 -48V DC Power Supply	1

Technical specifications are subject to changes without notice.

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