

SKU: 0110-0284
Category: Cards/Units

VDSL2 6+6B Plug-in Card

Optimize your broadband strategy by expanding bandwidth service delivery capacity of Tellabs 1000 Multi-Service Access Platform (MSAP) with the new VDSL2 6+6B card. With the Tellabs VDSL2 6+6B, you can deliver integrated voice, data and video applications from the Tellabs 1000 MSAP taking advantage of both VDSL2 and ADSL2+ capabilities. The card supports broadband service over a single copper pair or via two adjacent bonded copper pairs. This enables operators to provide higher speed broadband services across existing copper Customer Service Areas (CSAs). Operating in both IP/Ethernet packet-based and ATM environments, the VDSL2 supports Packet Transfer Mode (PTM) traffic as well as ATM mode over copper.

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Features

- •Single card for all ADSL2+ and VDSL2 functions
- •Six ports of integrated DSL and POTS
- •Saves Cost and Minimizes Equipment Inventory
- •VDSL2, VDSL2 bonding, ADSL2+, ADSL2+ bonding, ADSL2+ PTM, ADSL2 and ADSL1
- •ADSL2+ Annex M, ADSL2+ Annex L and ADSL2 Annex M are supported
- •DSL Speeds Supported up to 100Mb/s
- •Provision via Craft User Interface (CUI) and Tellabs Panorama Element Management System (EMS)

Highlights

Leverage Existing Tellabs 1000 MSAP

Deploy rapidly, utilizing embedded base, to meet funding requirements and market by capitalizing on using existing copper plant.

Win More Broadband Stimulus Projects

Enables higher Connect America Fund (CAF) and Rural Digital Opportunity Fund (RDOF) speeds with minimal capital investment and more granular provisioning.

Expand Services Areas

Broaden service areas to serve more subscribers with greater bandwidth while economically serving higher speed connectivity to residential and business customers.

Provide More Premium Services

Deliver faster speeds to improve customer satisfaction and retention. Plus, increase premium service rates to generate more revenue.

Specifications

Physical

- •Height: 5.125 in (13.018 cm)
- •Width: 0.563 in (1.429 cm)
- •Depth: 10.5 in (26.67 cm)
- •Weight: 0.5 lb (0.23 kg)

Interfaces

- •Integrated VDSL2, ADSL2+ and POTS (6+6) interface

Power Consumption

- •Power consumption: 21.56W (100% DSL lines trained and 6 CCS voice)
- •Input impedance: 100 ohms @ 30 kHz to 2.2 MHz
- •Low-power mode, during port inactivity, can be provisioned in seconds
- •Configurable power shut-off feature, during battery backup conditions

POTS Features

- •Six 2-wire POTS circuits per card
- •On-hook transmission (CLASS) capability

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- Forward disconnect
- 900 ohm +2.16 QF local exchange impedance
- 1830 ohm maximum DC supervision range
- Support for GR-303, TR-8, and TR-57 switch interface configurations
- Transient protection for outdoor bridging
- Loop test support including MLT
- Support for CMWI (Call Message Waiting Indicator)

POTS Signaling

- End-to-end signaling delay (normal and reverse)
- Pulse distortion (pw > 25 msec)
- Ring trip detector sensitivity (85 Vrms, 20 Hz)
- Ring trip delay (85 Vrms, 20 Hz)
- Maximum loop length incl. station 1830 ohm @ 20 mA
- Loop current @ -52 Vdc battery 23 mA constant, 2 300 ohm feed
- Tip/ring open circuit voltage: Normal mode, -52 Vdc battery
- On-hook transmission mode > 41 Vdc
- Off-hook detection threshold
- On-hook detection threshold > 10.0 k ohm
- Audio Companding; QLaw
- Nominal input impedance 900 ohm + 2.16 QF
- Nominal loss (referenced to 2-wire 900 ohm) 2.0 dBm 3 0.5 dB off-hook
- Maximum VF overload level 5.0 dBm @ 600 ohm
- Return loss (single frequency) > 18 dB (300 Hz to 3.4 kHz)
- Echo return loss > 13 dB (300 Hz to 500 Hz) > 18 dB (500 Hz to 2.5 kHz) > 14 dB (2.5 kHz to 3.4 kHz)

DSL Features

- 1830 ohms total loop length including station
- Downstream: rate adaptive up to 100 Mbps in 32 kbps increments
- Upstream: rate adaptive up to 50 Mbps in 32 kbps increments
- Downstream (two bonded pairs): rate adaptive up to 200 Mbps in 32 kbps increments
- Upstream (two bonded pairs): rate adaptive up to 100 Mbps in 32 kbps increments
- Single pair mode supports G.DMT, ADSL, ADSL2, ADSL2-annex L, ADSL2+, ADSL2+ PTM, VDSL2 profile 8a and VDSL2 profile 17a
- Two pair bonded more supports ADSL2+, ADSL2+ PTM, VDSL2 profile 8a and VDSL2 profile 17a
- ADSL2+ Annex M, ADSL2+ Annex L and ADSL2 Annex M are supported

LED Indicators

- Red, non-blinking FAIL: plug-in card failure or card is unable to communicate with the CPU
- Red, blinking FAIL: one or more ADSL circuits are receiving illegal signaling
- Green, non-blinking BUSY: one or more ADSL circuits are active. Green, non-blinking SYNC

Compliance

- G.993.2 (VDSL2)
- G.992.1 (G.DMT)

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- •G.992.3A (ADSL2 Annex A)
- •G.992.3L (ADSL2 Annex L)
- •G.992.5 (ADSL2+)
- •GR-TSY-000057
- •GR-TSY-000303
- •GR-TSY-000008
- •GR-63-CORE
- •GR-1089-CORE
- •ANSI T1.413-1998
- •G.992.2
- •G.992.3
- •G.992.5
- •G.994.1
- •G.998.1

Environmentals

- •Altitude: Up to 10,000 feet
- •Temperature: -40° to +149° F (-40° to +65° C)
- •Relative Humidity: 5–95% noncondensing

Alarm / Monitor / Test

- •DSL loop diagnostics
- •Single Ended Line Test (SELT)
- •Supports metallic test access
- •Performance Monitoring

Installations

- •Supported in Tellabs 1000 CBA

Software Support

- •Supported in Tellabs 1000 MSAP Feature Package (FP) FP17.0.6 and higher
- •Holds two versions of software with image integrity checking and automatic rollback
- •Option for Tellabs Panorama Element Management

Management

- •Craft User Interface (CUI)
- •Tellabs Panorama Element Management System (EMS)

Ordering Information

- •VDSL2 6+6B: 0110-0284

General

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