# TE820 Octal-Span Digital Card



Digium's TE820 Octal-Span digital card is built exclusively for high-density Asterisk® applications that require high-performance, cost effective digital connectivity. The TE820 includes eight independently software-selectable digital telephony interfaces, supporting up to 192 channels (in T1/J1 mode) or 240 channels (in E1 mode) — the highest single-card port density available for use with Asterisk. The TE820 seamlessly interconnects traditional telephony systems with Voice over IP (VoIP) technologies at the lowest per-port price on the market today.

The TE820 card supports industry standard telephony protocols, including multiple variants of Primary Rate ISDN. Each span can be configured as either CPE or network for optimal flexibility. The optional VPMOCT256 hardware echo cancellation module, based on the industry-leading Octasic chipset, offloads the task of echo cancellation from the CPU, increasing overall system performance and call quality.

The TE820 card has been designed to be fully compatible with existing software applications and is fully integrated with Digium's Asterisk software. The open source drivers for Digium cards support an application programming interface (API) for custom application development. The combination of Digium hardware and Asterisk software provides a cost effective platform for building numerous communications solutions, from PBX system and VoIP gateways to call centers and complete unified communications suites. Digium solutions are paving the way for a new generation of worldwide communications.



**TE820** 



## **Features**

Up To Eight (8) T1, E1 or J1 interfaces\*
Up to 192 (T1/J1) or 240 (E1) simultaneous calls
Interfaces are software selectable (T1, E1
or J1 Mode)

Half-length, full-height PCI-Express card Optional 128ms hardware echo cancellation module

\*4 RJ-45 connectors, each supporting two circuits. Break-out dongles are included.

#### **Target Applications**

Enterprise Phone Systems
Enterprise IVR Servers
High-density VoIP gateway systems
High-density conferencing systems
Carrier media server platforms

#### Framing Types

Superframe (D4)
Extended Superframe (ESF)
Channel Associated Signaling (CAS)
Common Channel Signaling (CCS)

#### **Coding Types**

Alternative Mark Inversion (AMI)
Bipolar with Eight (8) Zero Substitution (B8ZS)
High Density Bipolar Order Three (HDB3)
with optional CRC4

#### **PRI Switch Compatibility**

EuroISDN (PRI or PRA) — Q.931/Q.921 AT&T 4ESS Network or CPE DMS 100 National ISDN 2 Lucent 5E CAS Voice Modes

#### Warranty

5-year parts and labor Exceptional Satisfaction Policy

#### **Production Quality**

ISO 9001 Certified

#### **Ordering Details**

1TE820F: 8 Span PCI Express T1/E1/J1 PRI Card

1TE820BF: 8 Span PCI Express T1/E1/J1 PRI Card with Echo Cancellation Module

1VPMOCT256LF: 256 Channel Echo Cancellation Module



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# **DIGIUM®**

Digium is the creator, sponsor, and innovative force behind Asterisk®, the industry's first and world's most popular open source telephony software. Additionally, Digium provides a variety of VoIP communication solutions that fit the needs of small, medium, and large businesses. Digium's product lines include commercial business phone systems, as well as software, hardware, and other components needed to create powerful custom telephony solutions.

### **BUSINESS COMMUNICATIONS SYSTEMS**

Digium's line of award winning Switchvox IP PBX phone systems are built on a strong foundation of our open source Asterisk software. Switchvox solutions are designed to be extraordinarily easy to use and provide features that most small and medium businesses had previously considered out of their reach.

Switchvox's web-aware unified communications capabilities are unique in an industry cluttered with old technology. Integration with web and back office applications turns your phone system into a powerful platform for employees' productivity and efficiency. Its web-based Switchboard provides an intuitive control panel to assist with call management in real time while unifying phone calls, faxes, e-mails, instant messaging, Google Maps, CRM systems and other web tools from an easy-to-use, centralized control panel.

We're able to offer these PBX systems with superior capabilities for a fraction of the cost of traditional vendors' products because the shift to an open source software foundation represents a dramatic leap forward in telephony technology.

### **CUSTOM COMMUNICATIONS SOLUTIONS**

Digium empowers users, developers and integrators to build custom telephony solutions by offering a variety of software, hardware, and third-party components. From a simple phone system, to a sophisticated telephony application, Digium makes it possible for the world to communicate in an infinite number of ways at a fraction of the cost of proprietary solutions.

At the heart of these offerings is Asterisk, the powerful open source telephony development toolkit. Asterisk is free software that turns an ordinary computer into a feature-rich voice communications platform. Its flexible architecture lets you configure it as an IP PBX, a voicemail server, IVR server, VoIP gateway, call recorder, automatic call distributor and virtually any other voice-enabled application you can imagine.

To support Asterisk-based solutions, Digium offers a full line of high quality analog and digital interface cards to connect your solution to the public telephone network. In addition, Digium offers add-on software components like Fax For Asterisk, G.729 codec, and high performance echo cancellation (HPEC) to enhance your solution.