The Patton Model 6511 Matrix Switch is an integrated multimedia switching engine complete with a digital access cross-connect, high-speed STM-1/OC-3 trunk interface, wire-speed Ethernet packet switch, and GUI management system.

The Model 6511’s flexible channel switching fabric allows non-blocking switching from any input to any output. The Channelized STM-1/OC-3 interface integrates into a SDH/SONET network, enabling users to channelize an STM-1/OC-3 down to 64 kbps timeslots. With full grooming capability the Model 6511 DACS allows any-to-any TDM mapping and can place any channel from any card onto any port.

Combined with the ForeFront AIS Packet-Switched Backplane, the Model 6511 redundantly interconnects every slot, at wire-speed, and aggregates traffic from each system card onto dual-switched uplink Ethernet ports. With increased performance and throughput, the packet backplane allows non-blocking access to the Model 6511, other system cards, and the uplink ports.

With the Forefront architecture, TDM and packet can be used simultaneously and to full capacity. In a system loaded with dual 6511’s, the high speed channel switching and packet backplane on the Model 6511 offers 1+1 redundancy.

Management is a snap with VT-100, TELNET, SNMP and WEB options. Manage traffic out-of-band via dual 10/100/1000 Ethernet ports or terminate PPP/FR via timeslots in-band. With the integrated L2/L3 switch the Model 6511 provides management access to all cards within the chassis.

Master time and space with the Model 6511 Matrix Switch and realize an unequaled level of density and control over the new convergent network.

Visit www.patron.com for more information.
The ForeFront architecture guarantees total non-blocking operation for any TDM application and for Packet switching applications over the redundant Packet Switching Bus (PSB). With the ability to simultaneously transmit and receive on both full-duplex 10/100/1000 Ethernet up-link ports, the 6511RC offers unparalleled switching to any DSL, E1, STM-1/OC-3 media as well as redundant PSB and TDM buses.

Complete user flexibility allows switching of any time slot from any interface to any port within the system.

Patton’s ForeFront Access Solutions for DSL address the new point-of-presence requirements demanded by today’s providers operating IP and TDM networks. Using a modular approach, the ForeFront AIS includes all system components to provide DSL access. Fully redundant power and integrated cooling enable the lightweight chassis to scale for density and services. DSL line cards offer the latest ITU/ETSI G.SHDSL technology for true standards based connectivity. Grooming facilities and high speed softswitch allow any-to-any cross-connecting to T1/E1s or STM-1/OC-3 interfaces. Integrated management gives command over the entire system end-to-end and offers tools for fault detection, isolation, and correction.

ForeFront System Elements

ForeFront Next Generation DSL Network Access

Specifications

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Mapping</td>
<td>DS1<del>VT1.5 -&gt; STS-1 SPE, TU-11 -&gt; STM1/V3C, TU-11 -&gt; TUG3 -&gt; STM1/V3C, TU12 -&gt; STM1/V3C, TU-12 -&gt; TUG3 -&gt; STM1/V3C; E1</del>VT2 -&gt; STS1 SPE, TU-12 -&gt; STM1/V3C, TU-12 -&gt; TUG3 -&gt; STM1/V3C; DS3<del>DS3 -&gt; VC3 -&gt; AU3 -&gt; STS-1 SPE, STM-1</del>G.707; SONET/STS3~ Per ANSI T1.105.02-2001</td>
</tr>
<tr>
<td>Clocking</td>
<td>STM-1~G.813; STS-3 - ANSI T1.101-1999, T1.105.09-1995, G4-1244</td>
</tr>
<tr>
<td>Error Counts</td>
<td>G.821 &amp; G.826 (ES, SSES, ES, EB, and BBE; T1.231 &amp; GR-253-CORE ES, SES, US and SEFS</td>
</tr>
<tr>
<td>Line Testing</td>
<td>PRBS per ITU-T 0.151 &amp; 0.152; DS3/E3 Diagnostic &amp; Line Loopback; DS2 Demux Loopback; T1/E1 Diagnostic &amp; Loopback</td>
</tr>
</tbody>
</table>

Ethernet Ports: Dual 10/100/1000 Base-T (RJ-45 connector)

STM-1/STS-3 Ports: Single mode dual SC fiber (20km) per G.957 using 1310 nm lasers per G.652 or Dual 75-Ohm BNC per G.703

LED Indicators: LEDs for power, CPU, Dual Ethernet, test mode, egress synchronization, egress trunk status

Management: SYSLOG Client, Remote Software Upgrade via FTP

Alarm Reporting: Configurable alarms; Remote SNMP Traps; Front Panel LEDs


Environment: Operating temperature: 14 to 140°F (0 to 60°C); Humidity: 5 to 90%, non-condensing