Increasing IP circuit reliability

Clean Switching Over IP

IPS-6200 2 x 1 Seamless IP Changeover
IP Changeover Switcher (2 inputs)

Standalone ASI/TS over IP changeover in a 1U enclosure. Monitors TS-level IP signals in redundant input and instantly switches ports if errors occur, enabling seamless output without disruptions.

IP-based changeover for monitoring redundant TSoIP signals from multicast TS-level encoder transmissions and seamlessly switching ports if errors occur. To prevent transmission path error, this changeover further increases the reliability of duplex transmission.

Features

Seamless switching between outputs of the same encoder
When installed at the far end of a network link, the IPS-6200 seamlessly switches between redundant encoder TSoIP input used in multicast transmissions or the like. This supports completely seamless switching without video or audio disruption.

Auto and manual switching
When a signal error occurs, the IPS-6200 automatically switches to the other line. Manual switching and auto/manual assignment of each line are also possible. For example, the following assignment can be selected: Automatic switching from the current line to the reserve line, and manual switching from the reserve line to the current line.

Delay adjustment function
The delay difference between different lines is absorbed quickly and both phase inputs are automatically aligned to achieve seamless switching that does not disrupt the output. The delay adjustment range is up to 10 seconds.

TS-level monitoring
TS-level error monitoring, already proven reliable in switching, is used for IP signals. Error monitoring goes beyond TR 101 290 guidelines to check for packet loss, null-only, and other critical errors affecting signal quality. Error detection can also be enabled or disabled based on the type of signal. Set the PID error detection threshold as desired, in 1 ms increments. Up to four sets of multi-program signals are supported.

GUI-based remote control and monitoring
Ethernet interfaces enable a wide range of remote monitoring and control to suit many usage scenarios. The dedicated GUI can be used to make settings and graphically display error monitoring contents via Ethernet. An event log viewer, automatic CSV file generation, and other functions are also provided to facilitate signal management requiring historical condition data. SNMP-based control, configuration, and monitoring is also supported.

ASI and IP input both supported
Choose ASI or IP for each signal supplied. Enables mixed input, using IN 1 on the IP side and IN 2 on the ASI side, for example. Ideal for redundant ASI/satellite operation.
## Specifications

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IP port</strong></td>
<td><strong>Transmission standard</strong>: IEEE 802.3ab / IEEE 802.3u compliant</td>
</tr>
<tr>
<td><strong>Connector</strong></td>
<td>RJ-45 (Input x 2, Output x 1)</td>
</tr>
<tr>
<td><strong>ASI port</strong></td>
<td><strong>Signal Standard</strong>: DVB-ASI (EN50083-9) compliant</td>
</tr>
<tr>
<td><strong>Input</strong></td>
<td>Packet / Burst, 188 / 204 bytes</td>
</tr>
<tr>
<td><strong>Output</strong></td>
<td>Packet, INPUT / 188 byte fixed /204 byte fixed</td>
</tr>
<tr>
<td><strong>Effective bit rate</strong></td>
<td>1 Mbps to 200 Mbps</td>
</tr>
<tr>
<td><strong>Connector</strong></td>
<td>75Ω unbalanced BNC (Input x 2, Output x 2)</td>
</tr>
<tr>
<td><strong>Pass-through</strong></td>
<td>Pass-through from IN 1 to OUT (via mechanical relay) when the power is turned off</td>
</tr>
<tr>
<td><strong>TS over IP</strong></td>
<td><strong>Transmission standard</strong>: SMPTE 2022-2</td>
</tr>
<tr>
<td><strong>Transmission protocol</strong></td>
<td>RTP/UDP/IPv4</td>
</tr>
<tr>
<td><strong>Communication format</strong></td>
<td>Unicast/multicast (IGMPv2)</td>
</tr>
<tr>
<td><strong>TSP per IP</strong></td>
<td>1-7</td>
</tr>
<tr>
<td><strong>Monitor/control system</strong></td>
<td><strong>Buffer capacity for delay adjustment</strong>: 10 seconds</td>
</tr>
<tr>
<td><strong>System delay</strong></td>
<td>Standard 50 ms / min. 5 ms (depends on the offset value)</td>
</tr>
<tr>
<td><strong>Error detection item</strong></td>
<td>(Can be enabled/disabled for each signal)</td>
</tr>
<tr>
<td><strong>CC / PID error details</strong></td>
<td>Automatically detected PID:</td>
</tr>
<tr>
<td><strong>External control</strong></td>
<td>ETHERNET</td>
</tr>
<tr>
<td><strong>Power supply voltage</strong></td>
<td>10BASE-T / 100BASE-T / 1000BASE-T</td>
</tr>
<tr>
<td><strong>Power consumption</strong></td>
<td>30 W</td>
</tr>
<tr>
<td><strong>Dimensions</strong></td>
<td>430 (W) x 450 (D) x 44 (H) mm</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>Approx. 7 kg</td>
</tr>
<tr>
<td><strong>Temperature / Humidity</strong></td>
<td>5℃ to 40℃ / 85% or less (no condensation)</td>
</tr>
</tbody>
</table>

Note: Specifications subject to change without notice. Information valid as of January 2015.

## External View

- **Front panel**
- **Rear panel**

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