

# Clean Switching Over IP

## Increasing IP circuit reliability



## 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 TS/IP 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 TS/IP 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

IP port	Transmission standard	IEEE 802.3ab / IEEE 802.3u compliant
	Connector	RJ-45 (Input x 2, Output x 1)
ASI port	Signal Standard	DVB-ASI (EN50083-9) compliant
	Input	Packet / Burst, 188 / 204 bytes
	Output	Packet, INPUT / 188 byte fixed / 204 byte fixed
	Effective bit rate	1 Mbps to 200 Mbps
	Connector	75Ω unbalanced BNC (Input x 2, Output x 2)
TS over IP	Pass-through	Pass-through from IN 1 to OUT (via mechanical relay) when the power is turned off
	Transmission standard	SMPTE 2022-2
	Transmission protocol	RTP/UDP/IPv4
	FEC	SMPTE 2022-1 / Pro-MPEG CoP#3
	Communication format	Unicast/multicast (IGMPv2)
Monitor/control system	TSP per IP	1-7
	Buffer capacity for delay adjustment	10 seconds
	System delay	Standard 50 ms / min. 5 ms (depends on the offset value)
	Error detection item (Can be enabled/disabled for each signal)	<ul style="list-style-type: none"> <li>No signal</li> <li>Packet loss (including illegal code error)</li> <li>TR101 290 P1 / P2 (PMT 1-4 error detection for MPTS can be configured individually.)</li> <li>NULL only error</li> </ul>
CC / PID error details (Can be enabled/disabled for each signal)	Automatically detected PID:	PAT / PMT / VIDEO / AUDIO1 / AUDIO2 / AAC AUDIO1 / AAC AUDIO2 / DATA1 / DATA2
	USER_PID:	USER1_PID / USER2_PID / USER3_PID
External control	ETHERNET	10BASE-T / 100BASE-TX / 1000BASE-T <ul style="list-style-type: none"> <li>Signal status monitoring / Main unit setting / Log viewer / File save function by dedicated GUI</li> <li>SNMP monitoring / control by means of dedicated MIB files (SNMP v1 / v2c) (Main unit control and notification of error traps for up to four different IP addresses)</li> <li>For Maintenance (For firmware updates)</li> </ul>
	Other	Power supply voltage: 100 V to 240 V AC (hot-swappable redundant power supply) Power consumption: 30 W Dimensions: 430 (W) x 450 (D) x 44 (H) mm Weight: Approx. 7 kg Temperature / Humidity: 5°C to 40°C / 85% or less (no condensation)

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

# External View



Front panel



Rear panel



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ISO 9001 and 14001 certified (Sakura R&D)

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