XBT 105

Re-Multiplexer with SFN Adapter (for regionalization content)

> XBT 105

XBT 105 IRRM is an Integrated Satellite Receiver, Remultiplexer and SFN adapter allowing the Synchronous regionalization of TS content received.

IRRM105 multiplexer performs the following basic functions:
• GPS receiver capable of synchronizing internal time generators
• Auto-PID filtering for Services regionalization
• Auto-restamping of SI for Services regionalization
• Megaframe Information Packets generation synchronized by MFP system
• PID re-mapping on each logical input
• Network adaptation to the exact bit rate according to DVB-T/H RF parameters with PCR re-stamping

Inputs to multiplexers are:
• ASI transport streams
• 1 RF connector for DVB-S / S2 reciver
• 1 RTP clients for RTP/DP encapsulated Transport Streams

Outputs from multiplexers are:
• ASI transport streams
• 1 RTP/DP Server carrying encapsulated Transport stream
• IGMP generation

As any multiplexer of the IRRM family, it has built-in:
• web server to dispatch a Java applet for interactive management
• java applet tested on most popular browser
• java applet downloadable for local execution
• SNMP server for remote control internal file system accessible via TCP/IP and TFTP protocols for easy remote upgrade
• ultra fast storage are for event system storage
• telnet server for access via character based terminals
• Geographical coordinates available
• Battery powered local time clock automatically synchronized to UTC
• 8 trap address for automatic alarm/monitoring

Main Features

Remote control interfaces
RS-232
• Dedicated DB9 connector
• Data only
• Also available on remote control DB25 connector
• 230400 bps
Relays
• 4 relays for alarm/info
• NO & NC contacts at connector
• Available on remote control DB25 connector
Opto couplers
• 4 opto couplers for command
• Internal floating current generator
• Common anode
• 2 mA max on current
Functions
• Default: 1 relay alarm/ok
• Option "N1": use relay and opto for SSBT N+1 system
• Option "ALG": use relay and opto according RAI specs

ScreenService

PHYSICAL	
Rack frame	1U
Size	(W) 484 mm x (H) 45 mm x (D) 346 mm
Weight	4kg

POWER SUPPLY
90–270 VAC PFC corrected power supply
Nominal power 38 VA
Power factor: 0.95
Max inrush current 15A
M6 screw for extra ground connection

Power cord	Default - Italy
	Option "UK" - UK standard
	Option "DIN" - Germany and central Europe DIN connector
	Option "US" - US standard

ASI INPUTS
EN 500083–9 compliant
BNC connectors 75 ohm
Maximum bit rate 155 Mbit

RF INPUT
DVB–S / DVB–S2 compliant
F type female connector 75 ohm
Input frequency 950–2150 MHz

Ethernet connection
10/100/1000 Mbit Ethernet connector
1 IP address for web server, management, SNMP server, Telnet, TFTP and remote update
1 IP address/port for RTP/UDP servers
1 IP address/port for RTP/UDP clients
RTP protocol: ProMpeg cop3 with no FEC packet processing/generation, selectable 90KHz/27MHz timestamps

GPS INPUT
TNC connector 50 ohm
Phantom power 3 Volt 50 mA short circuit protected
GPS L1
12 channel simultaneous operation
45 s typical cold start TTFF
38 s typical warm start TTFF
5 s typical hot start TTFF
<0.5 s reacquisition
Sensitivity Acquisition/Tracking –185dBW / –185dBW
30ns rms accuracy, <10ns resolution

ASI OUTPUT
EN 500083–9 compliant
BNC connectors 75 ohm
Maximum bit rate 155 Mbit

FRONT PANEL
4 x 20 alpha displays
8 button navigation
Basic setup and status

REFERENCE INPUTS	
10MHz	SMB connector
	1Vpp sine
	50 ohm terminated
	AC coupled
	Option "HIZ" available
1 sec PPS	SMB connector
	0.4 VIL
	1.7 VIH
	Dc coupled
	50 ohm terminated
	Option "HIZ" available

REFERENCE OUTPUTS	
10MHz	SMB connector
	1Vpp sine
	50 ohm
	DC coupled
1 sec PPS	SMB connector
	0.2 VOL @ 64 mA IOL
	2.2 VOH @ 64 mwA IOH
	Dc coupled
	50 ohm capable

SOFTWARE
Java applet requires Java 6 Version 13 or more recent
Java applet tested on Safari, Internet Explorer, Mozilla
Browser will download automatically suitable version of Java if connected to internet
SNMP v1

Available Options

- "UK" – UK standard power cord
- "DIN" – Germany and central Europe DIN connector
- "US" – US standard power cord
- "HIZ" – 10MHz option "HIZ" available
- "HIZ" – 1 sec PPS option "HIZ" available
- "N1" – use relay and opto for SSBT N+1 system
- "ALG" – use relay and opto according RAI specs