



The EK-SFN/1 works as an SFN adapter. The board is composed by four ASI input (2 physical + 2 internal), two ASI output and one GPS input. The block scheme of the EK-SFN/1 is depicted on the next page. The user can selects, by the menu, the ASI input to send to the MUX unit (see EK-SFN/1 block scheme). It is possible to select the ASI input present on the BNC 1 connector (ASI IN 1), the ASI input present on the BNC2 connector (ASI IN 2) or the ASI transport stream coming from the internal lines connections (INT MPX or INT DEC).

It is also possible to set the Auto parameter that send on the Mux unit, the first ASI input that is not in alarm conditions in according with the following priority : ASI 1, ASI 2, Int Mpx and Int Dec. The ASI input transport stream coming from the input selector, is muxed with the transport stream coming from the MIP section that it is synchronized with GPS receiver (1 pps signal).

The MUX unit, delete the stuffing from the input transport stream, insert the MIP table with data based on the GPS signal and re-insert the stuffing signal (Bit rate generator) to generate the correct out bit-rate on the two ASI OUTPUT connector (ASI OUT 1 and ASI OUT 2).

The output bit rate (Mb/sec) is automatically adjusted in according with the DVBT parameter setted by the user (see Settings menu).

The value of the output bit rate must be greater than the sum of the input transport stream present on the MUX unit input and the bit rate of the MIP table. If this relationship is not verified, an alarm occurs (Fifo full).At the power-off or if the board in not running correctly the ASI IN 1 is routed through mechanical switch directly to ASI OUT 1. During normal working condition, if the GPS signal is unlocked and the "bypass if fail" variable is switched to Yes (see Settings menu),the ASI IN 1 is routed on the ASI OUT 1.



Features

- 4 different TS input
- GPS Reference
- SFN Time and Freq. Sync
- Hierarchical mode
- TS Output up to 215Mbit/s
- Complete web/SNMP
 management

Applications

- Digital Microwave Links
- DTV, DVB-T, DVB-S

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TECHNICAL SPECIFICATION

TS Ports	ASI
GPS Antenna	Voltage = 5V
	Max. allowed current $= 50 \text{ mA}$
	Input impedance $= 50 \text{ Ohm}$
Input Stream type	ISO / IEC 13818-1
ASI Data-Rate	1-215 Mbit/s
Internal Data-Rate	1-54 Mbit/s
ASI i/o Reference	EN 50083-9
Power Consumption	<7.5 W
Input Connector ASI	BNC FEMALE 75 Ohm
Input Connector GPS	FFEMALE
Output Connector ASI	BNC FEMALE 75 Ohm



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