

BOARD PLUG-IN EK-UNM/3 “GbE + ASI MODEM”



The revolutionary feature applied to this board is the possibility to use at the same time both **GbE and TS ASI** interfaces selecting the data rate preferred for each IN/OUT so it is possible combine ASI and IP technology in broadcasting activities and to prepare a complete migration to IP.

When used in single carrier it allows the transport of signals with bit-rate up to 203 Mbit/s using constellations selectable from QPSK to 256 QAM and thanks to a particular hardware architecture it is possible to carry, for example using two Radio Links, data rate up until to 400 Mbit/s. on a single GbE port.

Settings on the Transparent Mux / Demux section allow furthermore to use this new board together all the previously available boards like the Modem EK-UNM/2, 4 ASI Mux/Demux boards, E1/T1 board, ect.. and build in this way a **MULTI-FLOW** transport solutions.

The board EK-UNM/3 allows to carry simultaneously IP and two TS ASI signals with a versatility and flexibility without precedent in the connections made through Backbone Systems, Point to Point Radio Links and Satellite contribution / distribution Systems.

Features

- Modulation: QPSK - 16/32/64/128/256QAM, COFDM
- 2 DVB-ASI Input / Output
- GbE Input / Output
- TS Internal Input / Output
- Internal Transparent MUX/DEMUX
- IF 70 MHz Input / Output
- DVB-S / DVB-T
- 6/7/8 MHz channel bandwidth
- Viterbi rate
- Reed Solomon
- Very good MER
- Transceiver mode

Applications

- Simultaneous ASI+IP Carrying
- Digital Microwave Radio Links
- Terrestrial and Satellite use
- IP Networking
- Two-way communication



TECHNICAL SPECIFICATION

Digital Mo-Demodulator		
<i>Common SPECS</i>	BB Input selection	GbE, 2 ASI , Internal , Baseband Remote Loop Back
	BB Output selection	Demodulator output, Baseband Local Loop Back
	Dem Input selection	Internal, IF2, Local Loop Back
	Mod output selection	Modulator, External, IF2, Clean Carrier (CW), Off
	Readings	ASI Inputs bitrate / IF RX level / MSE / RS error rate / Fifo status / RX Carrier Frequency error / Temperature
	IF frequency	70 MHz
	Frequency error	5 ppm
	Reference	External (10 MHz /1pps), Internal, Data
	Input level	-20 ÷ 5 dBm
	Output Level	-15 ÷ 0 dBm
<i>DVB-S</i>	Reference	EN 300 421 EN 301 210
	Constellation	QPSK (DVB-S std), 16 QAM, 32 QAM, 64 QAM, 128 QAM, 256 QAM
	Roll-off	0.15/ 0.20/ 0.25/ 0.35
	Viterbi rate	QPSK (1/2 2/3 3/4 5/6 7/8) 16 QAM (3/4 7/8) 32 QAM(9/10) 64 QAM (5/6 11/12) 128 QAM (6/7 13/14) 256 QAM (
	Symbnol rate	1 ÷ 31,5 MSym/s in 100 KSym/s steps
<i>DVB-T</i>	Reference	EN 300 744
	Constellation	QPSK 16 QAM 64 QAM
	Viterbi rate	1/2 2/3 3/4 5/6 7/8
	Guard interval	1/4 1/8 1/16 1/32
	Channel Bandwidth	6 MHz 7 MHz 8 MHz
	Carriers	2K, 4K, 8K
	Hierarchic Modes	Alfa1 Alfa2 Alfa4
TPS cell	Editable	

BLOCK SCHEME

