

DIGITAL RADIO LINKS SYSTEM



ALL4DIGIT
SYSTEM

DVB
Digital Video
Broadcasting

MAINFRAME MOD. EK-MFR/2



Mainframe EK-MFR/2 is the core of our high-density “All4digit” platform. Thanks to the Linux OS and 6 independent slots the device can be configured according to the current or future needs and works with any type of input: A/V, HD-SD/SDI, ASI, BTS, GbE, E1/T1, SPMTE310M and carry signals at any frequency from 2 to 23 GHz in all possible configurations: Split-Mount (IDU+ ODU), Full In Door (IDU) or Mobile versions with Single-carrier (QPSK÷256QAM) and Multi-carrier (COFDM) modulations always selected by the operator. The Mainframe reveals and automatically adjusts the functions of each cards placed inside the 19” 1U rack and displays the features on the front panel OLED display and/or through web GUI. The unit can be equipped with supply sections, also hot-swappable, both AC and DC, further an internal digital matrix allows the use of cards in any position without external wiring. Thanks also to our software suite EK-MST user’s can manage, configure and control parameters of each card either locally or remotely through connections SNMP, TCP/IP and GSM/GPRS.

FULL INDOOR VERSION



SPLIT MOUNT VERSION



AVAILABLE PLUG-IN BOARDS

AC/DC Power Supply Mod. EK-PWS/x

Plug-in Power Supply 85÷264Vac 18÷36Vdc
Plug-in Power Supply 85÷264Vac 36÷72Vdc
Plug-in Power Supply 85÷264Vac



AC Redundant Power Supply Mod. EK-PWS/A

Plug-in Power Supply 85÷264Vac
Hot Swappable Function



DC Redundant Power Supply Mod. EK-PWS/D

Plug-in Power Supply 20÷75Vdc
Hot Swappable Function



ASI+GbE MODEM Mod. EK-UNM/3

Plug-in Board Modem with IP (GbE) + 2 ASI IN/OUT
Supplied with IP (GbE) + 2 DVB-ASI IN/OUT
interfaces which allows to manage signals up to
155 Mbit/s (QAM) with IN/OUT at IF 70 MHz with
QPSK/QAM/COFDM constellation.



SDI MPEG2 CODEC Mod. EK-CDC/2T

Plug-in Board Real Time MPEG-2 SD CODEC
(4:2:0) with IN/OUT Analogue or SDI+AES/EBU
for 1V+2A complete of Mux/Demux section.



SDI MPEG2 DECODER Mod. EK-DCD/2T

Plug-in Board Real Time MPEG-2 SD DECODER
(4:2:0) with OUT Analogue or SDI+AES/EBU
for 1V+2A complete of Demux section.



SDI MPEG2 ENCODER Mod. EK-ENS/2 (WITH AUDIO EMBEDDED)

Plug-in Board Real Time MPEG-2 SD ENCODER
(4:2:0) with IN/OUT Analogue or SDI EMBEDDED
for 1V+2A complete of Mux/Demux section.



SDI MPEG2 DECODER Mod. EK-DCD/3 (WITH AUDIO EMBEDDED)

Plug-in Board Real Time MPEG-2 SD DECODER
(4:2:0) with OUT Analogue or SDI EMBEDDED
for 1V+2A complete of Demux section.



SDI MPEG4 ENCODER Mod. EK-ENR/1 (WITH AUDIO EMBEDDED)

Plug-in Board Real Time MPEG-4 SD/HD ENCODER
(4:2:0) with IN Analogue or SD/HD SDI EMBEDDED
for 1V+2A complete of Mux section.



SDI MPEG4 DECODER Mod. EK-DCA/1 (WITH AUDIO EMBEDDED)

Plug-in Board Real Time MPEG-4 SD/HD DECODER
(4:2:0) with OUT Analogue or SDI EMBEDDED
for 1V+2A complete of Demux section.



ASI TRANSPARENT MULTIPLEXER Mod. EK-MPA/4

Plug-in Board from 4 ASI to ASI TRANSPARENT MULTIPLEXER allows to multiplex 4 different ASI and generating an ASI transport stream at its output.



ASI TRANSPARENT DEMULTIPLEXER Mod. EK-DMA/4

Plug-in Board from ASI to 4 ASI TRANSPARENT DEMULTIPLEXER allows to de-multiplex 4 different ASI from an ASI transport stream at its input.



ASI HITLESS SWITCH Mod. EK-ASW/6

Plug-in Board HITLESS SWITCH OVER allows the automatic or manual switch-over between two different ASI signals without loss of signal.



ASI SWITCH Mod. EK-SWO/9

Plug-in Board SWITCH OVER allows the automatic or manual switch-over four different ASI signals with bypass feature.



RF SWITCH Mod. EK-SWO/x

Plug-in Board SWITCH OVER allows the automatic or manual switch-over between two different RF signals.



E1/T1 ASI ADAPTER Mod. EK-TAD/1

Plug-in Board E1/T1-ASI ADAPTER Allows the conversion of a E1 o T1 flux in a ASI transport stream.



ASI/SMPTE 310M ADAPTER TRANSPARENT MUX/DEMUX & SEAMLESS SWITCH Mod. EK-SFP/4

Plug-in Board with multiple functions



8xE1 MUX/DEMUX Mod. EK-MPX/8

Plug-in Board 8xE1 MUX/DEMUX to ASI that allows multiplexer and demultiplexer operations between a transport stream ASI and a 4E1 or 8E1 data flows.



UP/DOWN CONVERTER Mod. EK-UDC/xx

Plug-in Board UP/Down- CONVERTER AGILE freq. 1.980÷ 23.600* GHz P.out = 39 dBm@ 1dB c.p.*



NETWORK ADAPTER ASI <=> IP Mod. EK-SFP/4

Plug-in Board NETWORK ASI => IP / IP => ASI Allows the conversion of an ASI transport stream into IP and vice versa



UP CONVERTER Mod. EK-UCM/xx

Plug-in Board UP- CONVERTER AGILE freq.
1.980÷ 23.600* GHz P.out = 30 dBm@ 1dB c.p.*



DOWN CONVERTER Mod. EK-DCM/xx

Plug-in Board DOWN-CONVERTER AGILE freq.
1.980÷23.600* GHz complete of AGC section.



POWER AMPLIFIER Mod. EK-AMP/xx

Plug-in Board AMPLIFIER freq. 1.98 ÷ 14.5 GHz
P.out = 8W @ 1 dB c.p.*.



COAXIAL ADAPTER Mod. EK-CDP/2

Plug-in Board Coaxial Adapter allows the
connection between Mainframe to
Out Door Units (ODUs).



DIGITAL OUTDOOR UNITS

DIGITAL SINGLE CHANNEL OUTDOOR UNITS

Transmitter / Receiver Out Door Unit single
channel freq. 2÷23 GHz supplied in weatherproof
head with branching filter set on channel requested

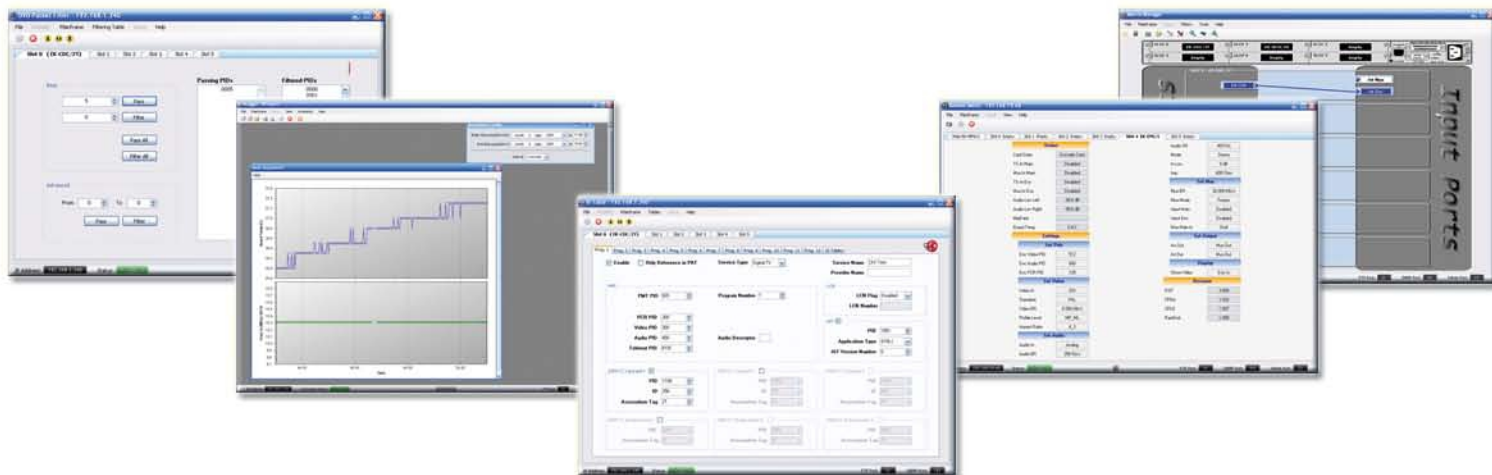


HIGH POWER DIGITAL MULTI CHANNEL OUTDOOR UNITS

Transmitter / Receiver Out Door Unit multi
channel freq. 2÷23 GHz supplied in weatherproof
head with wide band filter



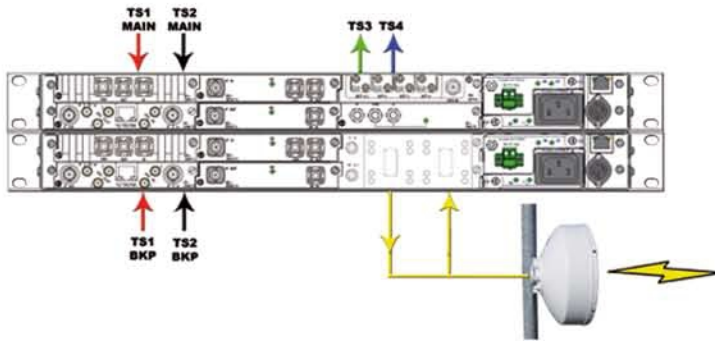
EUROTEK SOFTWARE SUITE



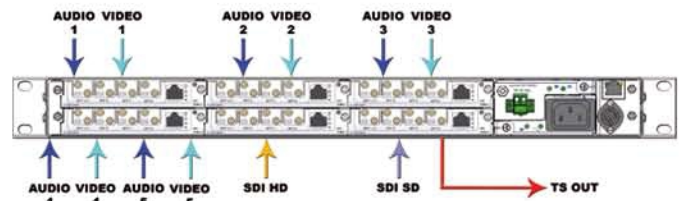
*For the channelling and output power available in digital configuration refers to A4D technical handbook.

TYPICAL APPLICATIONS

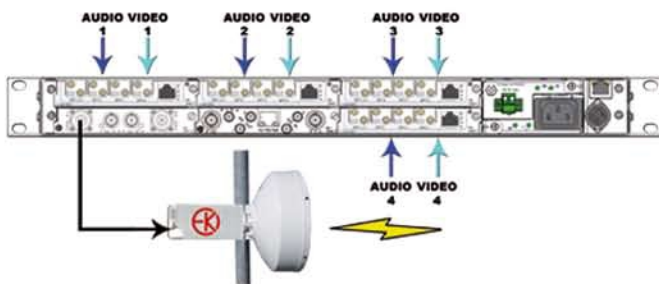
REDUNDANT 1+1 FULL DUPLEX DIGITAL RADIO LINK WITH HITLESS FREQUENCY DIVERSITY



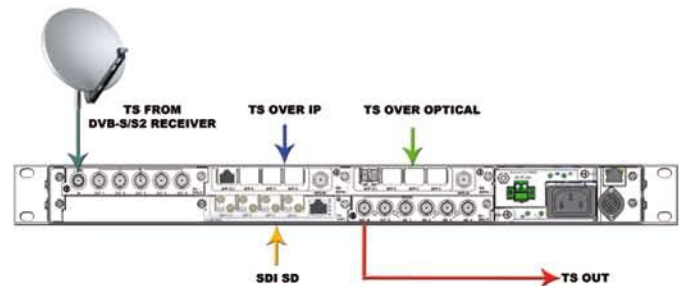
MULTICHANNEL HD/SD ENCODER



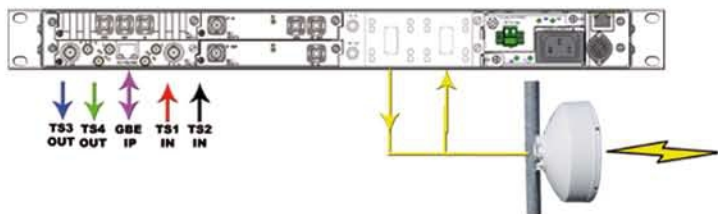
MULTIPLE HD DIGITAL RADIO LINK FULL OUTDOOR VERSION



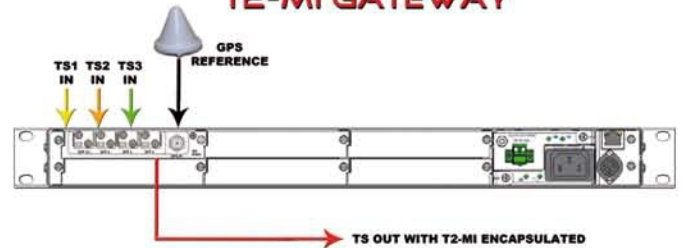
ASI REMULTIPLEXER WITH MULTIPLE TRANSPORT STREAM INPUTS



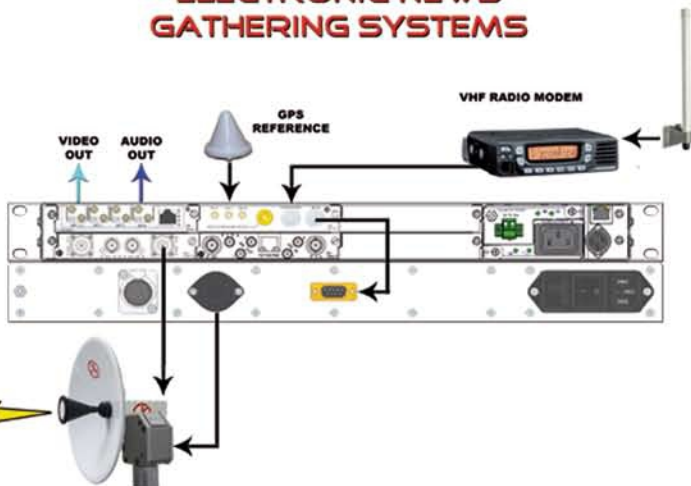
BIDIRECTIONAL RADIO LINK IP + 2 ASI



T2-MI GATEWAY



ELECTRONIC NEWS GATHERING SYSTEMS



MICROWAVE TRANSCEIVER WITH DVB-T2/T EMISSION

