MPEG-2 & H.264 RECEIVER-DECODER

This OMB equipment is a powerful and cost-effective broadcast level decoder. It supports signal receiving, multi-channel descrambling, multiplexing, external table/date insertion, transcoding and transmodulating. It also supports MPEG-2/ MPEG-4 SD/HD program decoding with two audio channels. With remote web-based management interfaces, it is ideal to support advanced content distribution, real-time signal conversion and transmission via all IP headend system.

GENERAL CHARACTERISTICS

RF

DVB-S/S2 INPUT	
INPUT	1 x RF (F type, signal input), 75Ω 2 x RF (F type, dual input), 75Ω
CONSTELLATION	QPSK, 8PSK
SYMBOL RATE	1-45Mbps
INPUT FREQUENCY	950-2.150MHz
MAX. BITRATE	150Msps
SIGNAL LEVEL	-65 to -25dBm
LNB PS	DC13V/18V at 350mA
CONTROL TONE	22K on/off
DVB-C INPUT	
INPUT	1 x RF (F type, signal input), 75Ω 2 x RF (F type, dual input), 75Ω
SYMBOL RATE	3.6-6.952MBauds
QAM TYPE	J83.A/B/C
INPUT FREQUENCY	48-862MHz
MAX. BITRATE	55Mbps
SIGNAL LEVEL	40-80dBuV

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www.omb.com

OMB EUROPA
C/ Paraguay 6, P.I. Centrovía
50198 La Muela
Zaragoza, España
europa@omb.com
comercial@omb.com

OMB AMÉRICA
8221 NW 30th Terrace
Miami, FL 33198
USA
usa@omb.com

DVB-T INPUT	
INPUT	1 x RF (F type, signal input), 75Ω 2 x RF (F type, dual input), 75Ω
CONSTELLATION	QPSK/16/64QAM
BANDWIDTH	6/7/8M
INPUT FREQUENCY	48-862MHz
MAX. BITRATE	31.67Mbps
SIGNAL LEVEL	-75 to -10dBm
TRANSMISSION MODE	2K, 8K
DVB-T2 INPUT	
INPUT	1 x RF (F type, signal input), 75Ω 2 x RF (F type, dual input), 75Ω
CONSTELLATION	16/32/64/128/256QAM
BANDWIDTH	1.7MHz, 5MHz, 6MHz, 7MHz, 8MHz, 10MHz
INPUT FREQUENCY	48-862MHz
MAX. BITRATE	50Mbps
TRANSMISSION MODE	1K, 2K, 4K, 8K, 16K, 32K
ISDB-T/TB INPUT	
INPUT	1 x RF (F type, signal input), 75Ω 2 x RF (F type, dual input), 75Ω
CONSTELLATION	QPSK/16/64QAM
BANDWIDTH	1.7MHz, 5MHz, 6MHz, 7MHz, 8MHz, 10MHz
INPUT FREQUENCY	48-862MHz
MAX. BITRATE	6Mbps
SIGNAL LEVEL	-75 to -10dBm
CARRIERS MODE	1K-42K, 3K
ATSC INPUT	
INPUT	1 x RF (F type, signal input), 75Ω
CONSTELLATION	8VSB
BANDWIDTH	6MHz
INPUT FREQUENCY	57-803MHz (fixed frequency)
SENSITIVITY	-83 to -8dBm
MAX. BITRATE	19.39Mbps

TS/IP (optional)

GbE IP	
INTERFACE	GbE level RJ45 port
SPEED	Up to 1000Mbps
PACKAGE FORMAT	UDP & RTP (auto detection)
TRAFFIC TYPE	Unicast: ARP Multicast: V2, V3 (optional)
FEC	ProMPEG CoP3v2 (input)
TCP/IP PROTOCOL	IPv4
IGMP	Version 1,2 & 3

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DVB-ASI

DVB-ASI	
INTERFACE	4BNC, 75Ω (2 x ASI input, 2 x ASI output)
MAX. BITRATE	100Mbps
PACKET TYPE	188/204 Bytes
INPUT MODE	Spread and burst
OUTPUT MODE	Support burst
SUPPORTS MPEG-2/H.264 SD/HD STREAM BYPASS TRANSMISSION	
SUPPORTS AC-3/E-AC-3 AUDIO BYPASS TRANSMISSION	

DVB DE-SCRAMBLING

DVB DE-SCRAMBLING	
DVB COMMON INTERFACE	2 slots
BIT-RATE	Max. 100Mbps
CAM SUPPORTED	NEOTION, SMIT, ASTON and other major CAMs
CAS SUPPORTED	CONAX, IRDETO, Novel-Super TV, CTI and other major CAS
BISS 1 & BISS E	Program level, decoded service only TS level optional
NUMBER OF SERVICES	Limited by CAM

RF MODULATION

OUTPUT	
INTERFACE	1 RF for 4 channels (DVB-C modulation, F type, 75Ω) 1 RF for 2 channels (DVB-T modulation, F type, 75Ω) 1 for RF monitor output (F type, 75Ω)
DVB-C MODULATION	
STANDARD	ITU-T J.83 annex A/C, annex B
CONSTELLATION	16/32/64/128/256QAM
SYMBOL RATE	4.4-6.952MBauds
OUTPUT LEVEL	90-115dBuV (depending on channels)
FRECUENCY RANGE	48-862MHz
EMR	38
DVB-T MODULATION	
STANDARD	ETSI EN 300 744
CONSTELLATION	QPSK/16/64QAM
CARRIERS MODE	2K, 8K
BANDWIDTH	6MHz, 7MHz, 8MHz
OUTPUT LEVEL	90-115dBuV (depending on channels)
FRECUENCY RANGE	48-862MHz

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DECODER

INTERFACE	
COMPOSITE VIDEO OUTUT	1 x BNC, 75Ω PAL/NTSC/SECAM
SD/HD-SDI OUTPUT	1 x BNC, 75Ω 2 x BNC, 75Ω (for model SDI)
DIGITAL OUTPUT	1 x HDMI type connector
ANALOG AUDIO OUTPUTS	4 x BNC, 75Ω unbalanced 4 x XLR, 600Ω balanced (for base/RL/SDI models) 1 x 15 Pin D-sub (4 x SLR breakout cable, for IP/AD/IP-G/TC2/TC4/QAN models)
AES/EBU	1 x BNC, 75Ω (for base/RL/SDI models) 1 x 15 Pin D-sub (1 x BNC, breakout cable, for IP/AD/IP-G/TC2/TC4/QAN models)
VIDEO DECODING	
VIDEO PROFILE/LEVELS	MPEG 2 SD 4:2:0 MP@ML MPEG 2 HD 4:2:0 MP@ML MPEG 4 AVC SD MP@L3 MPEG 4 AVC HD MP@L4.0/HP@4.0
OUTPUT FORMAT	720x576i@25 720x480i@29.97 1920x1080i@50,59,60 1920x1080p@24,30 1280x720p@50,59,60
ASPECT RATIO	4:3 letterbox, 4:3 pan and scan, 16:9 pan and scan
CONVERSION	Anamorphic
AUDIO DECODING	
NUMBER OF AUDIO SERVICES	2
AUDIO CODECS SUPPORTED	MPEG1L2 & MPENG2L2 Dolby digital (AC-3) Dolby digital plus (E-AC-3) AAC (MPEG2, MPEG4/HE v1, 2, MPEG4/LC)
OUTPUT FORMATS	Linear PCM & dolby E (pass-through) Digital pass-through PCM (down mixed for 5.1 sources) Analog (down mixed for 5.1 sources)
SDI EMBEDDED AUDIO OUTPUT	Two audio pairs
ADJUSTABLE VOLUME LEVEL	-63 to 0dB

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TS TRANSCODIGN

TS TRANSCODING	
PROCESSING CHANNELS	Four programs
INPUT	
VIDEO	H.264 (MPEG-4 part 10) or MPEG-2
VIDEO FORMAT	Up to 1080p30
ASPECT RATIO	4 :3, 16:9, auto
AUDIO	MPEG1 layer I/II MPEG2 layer II Dolby Digital (AC-3), optional AAC, optional
AUDIO MODE	Stereo, dual mono, single mono
OUTPUT	
VIDEO	H.264 (MPEG-4 part 10) 4:2:0 MP@L4 MPEG-2 4:2:0 MP@ML
FORMAT	576i, 480i (BT.656) 1080i50, 1080i60, 1080i59.94 720P50, 720P60, 720P59.94
AUDIO	MPEG-1 layer I/II AAC, optional
SUBTITLE AND AUDIO	Pass through
BITRATE	MPEG-2 video: 2.0-15Mbps (CBR & VBR) Audio: 64-384Kbps H.264 video: 1.0-20Mbps (CBR & VBR) Audio: 64-384Kbps
ADJUSTABLE VOLUME	-63 to 0dBm

GENLOCKING (optional)

INPUT	
GENLOCK SIGNAL	1 x BNC, black burst/tri-level sync
OUTPUT	
HD/SD SDI	2 x BNC, 75Ω
CVBS	1 x BNC, 75Ω
AUDIO	1 x DB-15, 2AES/EBU audios + 2 pairs balance audios
ANCILLARY DATA SUPPORT	
SDI ANC DATA	Closed captions (CEA-708)
SDI VBI WAVEFORM	Line 21 captions (CEA-608)

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MANAGEMENT

CONNECTOR	RJ-45 10/100Mbps auto negotiating
PROTOCOLS	HTTP and SNMP
USER INTERFACES	Full control via web GUI Front panel
AUTOMATION INTERFACES	Full status via SNMP Configurable SNMP traps
FIRMWARE UPDATES	Via web GUI

PHYSICAL & ENVIRONMENT

POWER SUPPLY	100-240 VAC 50/60Hz Dual AC (via hardware upgrade, optional) 36-72 VDC (via hardware upgrade, optional)
SIZE	One unit of 19” standard rack
DIMENSION	48.5x34x45cm
OPERATING TEMPERATURE	0 to 50°C
STORAGE TEMPERATURE	-40 to 70°C
RELATIVE OPERATING HUMIDITY	<95% non condensing

** The images and/or technical specifications are subject to change without previous notice.*

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