

Omniscreen OMM-101 is an integrated encoder modulator supporting both analogue AV and HDMI TV signals as inputs. These analogue or digital inputs can be encoded, multiplexed and modulated onto a single DVB-T or DVB-C carrier.

OMM-101 is a simple and affordable solution for an extra MATV/CATV channel within a campus or a community TV network.



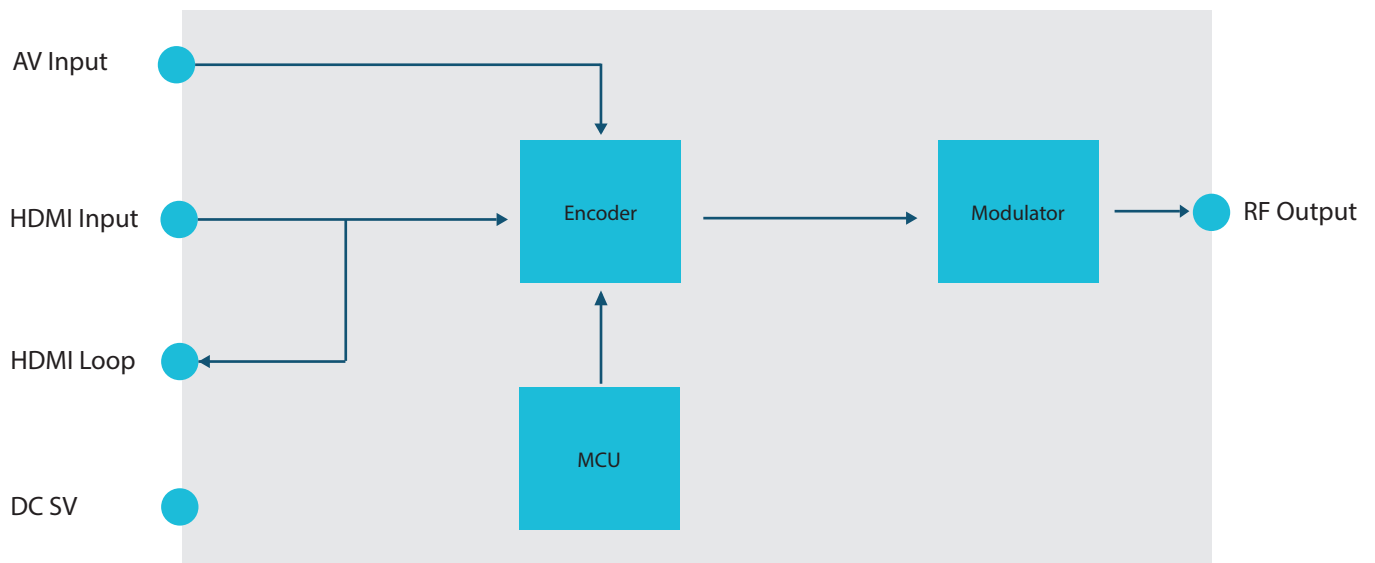
## KEY FEATURES

- Compliant with H.264/AVC BLP, MP, HP@L4.0 or less, MPEG-2 MP@ML
- DVB-T or DVB-C RF output (factory options)
- HDMI & CVBS Inputs
- HDMI Loop out through option
- NTSC, PAL, SECAM or Video resolution auto detect
- NTSC, PAL, SECAM or Video resolution auto generation
- LCD display with control keys
- 30sec QuickSet menu for all parameters
- TS ID, PID, Service name & LCN collision prevention mechanism
- RF output Frequency Range from 100MHz to 860MHz

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# FUNCTIONAL BLOCK DIAGRAM



# ORDERING INFORMATION

Interface	OMM101-T	OMM101-T+	OMM101-C	OMM101-C+
DVB-T RF output	•	•		
DVB-C RF output			•	•
CVBS input	•	•	•	•
HDMI input	•	•	•	•
HDMI output		•		•
LCD&Keyboard	•	•	•	•
QAM modulation	•	•	•	•
H.264 HD/SD	•	•	•	•
MPEG2 SD	•	•	•	•
AAC	•	•	•	•

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## INTERFACE

AV Input	CVBS, Audio_L/Audio_R
Connector type	phone jack for AV
HDMI	HDMI in*1 (SD or HD) (HDCP) and HDMI*1 Loop Out
LCD Display	2*16 characters
Keyboard	6 keys
Reset	push button
RF Monitor	F-type female, 75 Ω
RF out	F-type female, 75 Ω
DC Input	12V/1.5A, < 18W

## VIDEO COMPRESSION

Analog Input	Analog NTSC, PAL and SECAM
Digital Input	HDMI 1.4 (support HDCP)
Compression Standard	H.264/AVC BLP, MP, HP @ L4.0 or less, MPEG-2 MP@ML
Video Resolution & Recommended Compression Bit Rate	H.264 1080i(1920×1080)@25Hz,29.97Hz,30Hz: SMPTE274M: 1.5~11Mb/s 720p 1280×720 □@25Hz,29.97Hz,30Hz: SMPTE296M: 1.5~11Mb/s 480i 720×480 @ 29.97Hz: SMP-TE656M: 500K~6Mb/s 576i720×576 @ 25Hz: SMP-TE656M:500K~6Mb/s
Video Resolution & Recommended Compression Bit Rate	MPEG-2 480i 720×480@ 29.97Hz: SMP-TE656M: 3.5~6Mb/s 576i720×576 @ 25Hz: SMPTE656M: 3.5~6Mb/s
Aspect Ratio	4:3/16:9 auto detected
Video Compression bit rate	500K~13Mbps

## AUDIO COMPRESSION

Audio Input	HDMI or Analog
Compression Standard	MPEG-1 Layer II
Audio Sampling Rate	48 KHz
Audio Compression bit rate	MPEG1 Layer II :32~192Kbps(mono), 64~384Kbps( stereo)

## TS PROCESSING

PSI/SI	PAT, PMT, NIT, SDT and LCN auto generated
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## DVB-T MODULATION

Constellation	QPSK/16QAM/64QAM
Band Width	6/7/8MHz
FFT Mode	2K/8K
Guard Interval	1/4, 1/8, 1/16, 1/32
Code Rate	1/2, 2/3, 3/4, 5/6, 7/8
Modulation to Error Ratio, MER	>3dB

## DVB-C MODULATION

Standard	J.83 Annex A
Constellation	QPSK/16QAM/64QAM/128QAM/256QAM
Bandwidth	6/7/8MHz
Symbol Rate	2K/4K/8K/16K
BER	≤ 0.0E-9
Modulation to Error Ratio, MER	>36dB

## RF OUTPUT

Connector Type	1×F type female,75 Ω (primary output)
Output Frequency Range	100 – 860MHz agile, step by 10KHz
Output Level	90 – 100dB μV□ step by 1dB
Spurious Rejection	50dBc (typ.)
Output Return Loss	10dB (typ.)

## CONTROL & MONITORING

Monitoring	LCD
Control	keyboard

## PHYSICAL

Dimensions	206mm x 125mm x 35mm
Net Weight	0.5kg
Power Supply	DC 12V/1.5A
Power Consumption	Maximum 18W
Operating Temperature	0 – 45°C
Storage Temperature	-10 – 60°C
Operating Humidity	10 – 90% non-condensed

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