DVL SERIES QPSK IF MODULATOR

GENERAL DESCRIPTION -

• **The DVL Series QPSK IF Modulators** are designed to operate in the 863 MHz to 2150 MHz range to transfer multiple high quality digital Video and Audio programs in the same user-defined RF channel bandwidth.

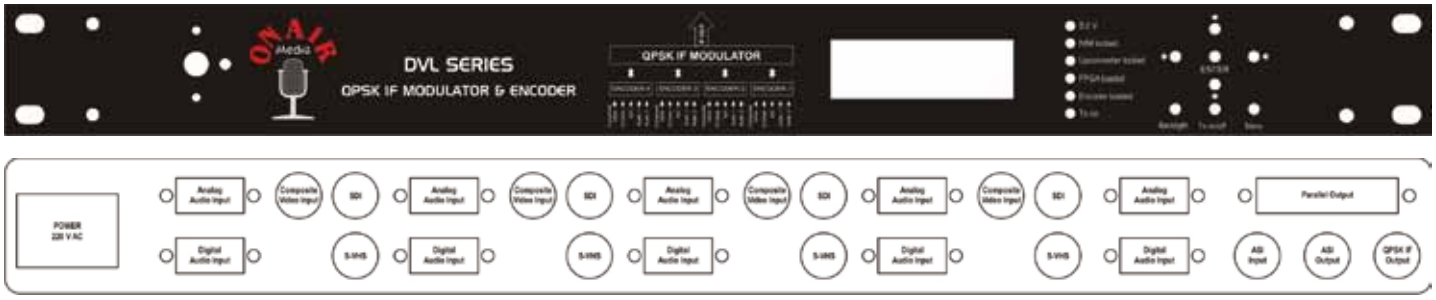
• **Ultra low phase noise oscillators** and a powerful linearity pre-corrector allow minimizing the Bit Error Rate (BER) also using the maximum spectrum efficiency modulation systems (BPSK, QPSK, 8PSK or QAM).

• **Bit-rate programmability.** The digital modulators have a fully programmable bit rate allocation for each program to widely define the quality and bandwidth of the modulation: this to guarantee the maximum flexibility in all applications.

• **Full metering**, control, setting and system diagnostic is available on the front panel.

• **Multichannel configuration.** The new ONAIR Digital DVL-IF series IF Modulator allows a top quality Video and Audio connection with possibility of multichannel configuration for a very spectrum efficient and cost effective solutio n.

- DVL-IF series IF Modulator/Encoder has 1, 2, 3 or 4 Video channels capacity and 2, 4, 6, 8 Audio channels capacity



GENERAL TECHNICAL FEATURES

• Operating Frequency from 863 to 2300 MHz
• Accepts up to 4 Video + 8 Audio Channels
• Add / Modify Tables (NIT, SDT...)
• Automatic Bit Rate Adaptation
• Forward Error Correction (RS 188/204; code rates 1/2 to 7/8; convolutional interleaving)
• Symbol Rate up to 20MS/s
• Tuning 1 kHz step
• Compliant to ETS300421 (DVB-S)

To include more than 4 Video and 8 Audio programs is possible to use external multiplexers and de-multiplexers for very high capacity networks.

DVL SERIES QPSK IF MODULATOR

TECHNICAL CHARACTERISTICS

VIDEO INPUT

Video Input Connector	BNC
Video Input Level	1Vp-p
Impedance	75 Ohm
Video format	PAL/NTSC/SECAM
Selectable Encoding Bit Rate	4:2:0 1.5 to15Mbps
Audio Input Connector	XLR-3

AUDIO INPUT

Audio Input Level	+10dBm max
Impedance	> 100kOhm, Unbalanced
Audio Frequency Interval	25 Hz-15 KHz
Audio Frequency Response	+/-0,5 dB max.
Operating Modes	Stereo, Joint Stereo, Dual channel and single Channel
Sampling Frequencies	32kHz, 48kHz, 56kHz, 64kHz, 80kHz, 96kHz, 112kHz 128kHz, 160kHz, 192kHz, 224kHz, 256kHz, 320kHz, 384kHz

MODULATOR

Modulation	QPSK
Inner FEC Code Rates	1/2, 2/3, 3/4, 5/6 and 7/8
Outer Code	188/204 Reed Solomon
Modulation Error Rate	>25 dB
Symbol Rate	1-45 Msymbol/s in 1 kSymbol-steps
Programming Resolution	1 Baud
Frequency	70 -482 MHz
Return Loss	>10 dB
Spurious	>-60dBc/4kHz
Connector	F-type in KU band, N type in ISM band

POWER

Line Input Voltage Range	185-265 VAC
Line Frequency	50 Hz +/-%10

ENVIRONMENTAL

Temperature Range	15 C to 50 C
Humidity	% 30-80

ORDER CODES

DVL10/IF/12	10 GHz QPSK IF MODULATOR 1 Video+2 Audio
DVL10/IF/24	10 GHz QPSK IF MODULATOR 2 Video+4 Audio
DVL10/IF/36	10 GHz QPSK IF MODULATOR 3 Video+6 Audio
DVL10/IF/48	10 GHz QPSK IF MODULATOR 4 Video+8 Audio
DVL10/IF/LR	10 GHz QPSK IF MODULATOR 2 Audio
DVL10/IF/2LR	10 GHz QPSK IF MODULATOR 4 Audio
DVL10/IF/3LR	10 GHz QPSK IF MODULATOR 6 Audio
DVL10/IF/4LR	10 GHz QPSK IF MODULATOR 8 Audio

Bostancı Yolu Cad. Keyap Çarşı Sitesi D-1 Blok No: 56 34775 Y.Dudullu - Ümraniye - İSTANBUL • Tel: 0(216) 540 70 45 • Faks: 0(216) 540 70 46 • E-mail: info@onair.com.tr