



FEATURES

- MFN operation
- Low power consumption
- Excellent noise figure
- High stability synthesized oscillators
- Mains or battery power supply (optional)
- Remote control interface

DESCRIPTION

The DKL GOLD SERIES digital microwave link is fully compliant with the DVB-S DTV standard and capable of Multi Frequency Network (MFN) operation. It features superior performance, great flexibility, and simple operation. The system is available with different output powers in several frequency ranges between 1.5 and 14.5 GHz, and is suitable for use as an individual point-to-point link or as part of a complete distribution network.

The transmitter, housed in a 3HE cabinet, is equipped with a plug-in DVB-S standard QPSK modulator with ASI input and modulation capacity up to 48 Mbps. The receiver, housed in a 1HE rack cabinet, has two ASI output signals and integrates a downconverter and an IRD. An optional external 1HE demodulator is required for analog audio-video outputs.

The system is available in both indoor and outdoor versions. In the outdoor configuration, RF modules are fixed in waterproof tin cases which can be mounted behind the parabolic antennas. The external head is connected to the internal cabinet by a single coaxial cable that passes the RF signal and power supply.

Compatible solid-state amplifiers are available for particularly difficult connections requiring additional power.

TRANSMITTER	
Data input	ASI, BNC female, 75 Ω
TS format	Burst mode or continuous mode
ASI input length	188 byte or 204 byte (with automatic adaptation)
TS input data rate	Up to 48 Mbps (with automatic adaptation)
Modulation	QPSK according to ETSI EN 300 421 (DVB-S)
Symbol rate	From 2.031 to 32.000 MBaud
Outer coder	Reed Solomon encoder 188 / 204
Inner coder	Punctured convolutional
Code rates	FEC = 1/2, 2/3, 3/4, 5/6, 7/8
IF frequency	70 MHz, 2 x SMB connectors
IF level	0 dBm
IF bandwidth (MHz)	1.35 x Symbol rate
Visual signalling LEDs	Data presence, 188/204 mode, data input overflow, system ok
Communication port	RS-232
RF output impedance	50 Ω
Local oscillators	Low noise PLL controlled
Output power backoff	QPSK -3dB typical
RECEIVER	
RF input impedance	50 Ω
Receiver input level	From -85 dBm to -35 dBm
Gain	> 30 dB, 35 dB typical
Noise figure	< 5 dB
Outputs	2 x ASI, BNC female, 75 Ω L band, BNC female, 75 Ω (for external IRD option)
Local oscillators	Low noise PLL controlled
EXTERNAL IRD (optional)	
Inputs	L band, F female, 75 Ω ASI in, BNC female, 75 Ω
Outputs	2 x ASI, BNC female, 75 Ω 2 x analog video, BNC female, 75 Ω 2 x analog audio, XLR male 2 x analog audio, RCA
GENERAL	
Power supply	230 VAC (110 VAC optional)
Operating temperature	-5 °C to +45 °C
Relative humidity	95 %, non-condensing
Cooling	Natural convection
Dimensions (W x H x D)	Transmitter: 438 x 132 x 418 mm Receiver: 483 x 44 x 521 mm
Size	Transmitter: 19" 3HE / Receiver: 19" 1HE
Weight	Transmitter: 12 Kg / Receiver: 3 Kg

MODEL	FREQUENCY RANGE	CONNECTOR	TRANSMITTER OUTPUT POWER	AMPLIFIER		
				OUTPUT POWER	DRIVER POWER	POWER CONSUMPTION
DKL-1/2-G	1.5 - 2.7 GHz	N	1W - 5W - 10W	20W - 40W	1W - 5W	90W - 150W
DKL-3/4-G	3.4 - 4 GHz	N	3W - 10W	10W - 20W	0.1W - 1W	65W - 80W
DKL-4/4-G	4 - 4.6 GHz	N	3W - 10W	10W - 20W	0.1W - 1W	65W - 135W
DKL-4/5-G	4.6 - 5.2 GHz	N	3W - 10W	10W - 20W	0.1W - 1W	65W - 135W
DKL-5/7-G	6.4 - 7.2 GHz	WR137	1W - 3W	10W	0.25W	90W
DKL-8/8-G	8 - 8.6 GHz	WR112	0.2W - 1W - 3W	6W	1.5W	65W
DKL-10/11-G	10 - 11 GHz	WR75	0.2W - 1W - 3W	10W - 20W	0.2W	110W - 130W
DKL-12/15-G	14 - 14.5 GHz	WR75	0.2W - 0.8W	3W - 6W	0.2W	30W - 60W

