

Cool-Dock Series Liquid-Cooled Solid State Transmitters



LARCAN Cool-Dock Series
1 kW DVB-T2 Transmitter

Cool-Dock Series: Refresh Your Thinking.

LARCAN's New Cool-Dock Series of liquid-cooled transmitters, defines a greater level of broadcast transmitter design. Based on the technology making waves in liquid cooling, Cool-Dock Series transmitters are the next generation in broadcast innovation.

Developed with the same reliability and serviceability that made LARCAN solid state products an industry leader, the Cool-Dock Series incorporates new 'Cool-Dock' technology which provides superior cooling while maintaining optimal serviceability. With no fluid disconnection required for regular service, Cool-Dock transmitters represent a new breakthrough in liquid cooled technology.

Designed from 'start to success' with award winning LARCAN quality and design philosophy, Cool-Dock Series seamlessly integrates proven technology with the next steps in rugged and rich delivery. A compact design with clear and consistent results – it's the best choice for broadcasters worldwide looking for next generation innovations in broadcast network solutions.

Cool-Dock Series: Innovative Solutions for Broadcast and Beyond

- New "Cool-Dock" technology; No coolant disconnect required for servicing.
- Broadband design, high efficiency amplifiers (typ 40% efficient)
- Compact, modular design allows for expandability
- Extensive monitoring and diagnostics
- Cost effective, high performance
- Reliable and user friendly

Cool-Dock Series

Liquid-Cooled Solid State Transmitters

Cool-Dock Series is available in power levels to 10 kW and beyond.

Cool-Dock Technology:



The concept behind Cool-Dock is a superior cooling configuration which utilizes no hose couplings, or water connections which need to be disconnected in order to service the transmitter modules. This innovation eliminates connection points along with potential for leaking or mechanical failure. As an added benefit, active device cooling is superior to traditional designs. The result is better performance and higher reliability.

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Specifications

DVB-T2 Transmitter COOL-DOCK 1kW

Output

Power	1000 Watts
Frequency	470-860 MHz
Output Connector	1-5/8 EIA Flanged
Modulation Error Ratio	34dB
Pilot Phase Noise	-105 dBc/Hz (20kHz offset)
Precise Frequency Offset	Any offset, 1Hz step size
Frequency Stability	±150 Hz

Signal Processing (Supported modes)

IFFT:	1K, 2K, 4K, 8K, 16K and 32K including extended carrier modes
Guard intervals:	1/4, 19/256, 1/8, 19/128, 1/16, 1/32, 1/128
Constellations:	QPSK, 16-QAM, 64-QAM and 256-QAM, rotated constellations supported
Code rates :	1/2, 3/5, 2/3, 3/4, 4/5, 5/6
Network modes:	MFN and SFN
Bandwidth:	8 MHz, 7 MHz, 6 MHz
Time interleaving:	Adjustable
Test modes	Single tone, PRBS, SFN etc.

GENERAL

Voltage	220-380VAC / 1-ph, 50/60Hz
Power Factor	0.9
No. of Cabinets	1

ENVIRONMENTAL

Temperature Range	0-45 deg C
Humidity	95% non-condensing
Altitude	3000m

DIMENSIONS

Height	1982 mm
Width	685 mm
Depth	1120 mm