

VORTEX™ Diversity Open Frame Module

DVFR-1000 Series

The DVFR-1000 Vortex™ Diversity Open Frame Video Receiver has all of the same features you'll find in the single VFR-500 Vortex but adds the heightened performance of DTC's Diversity Technology inside.

Diversity receiver systems work on the principal of receiving two signals, with antennas placed apart from each other. The VideoVoter compares the incoming signals continuously, and instantly switches to the better signal, thus eliminating "drop outs" or dead spots. Our exclusive VideoVoter board automatically switches to the best signal at more than 15 thousand times each second.

Side-by-side comparisons of single receiver systems versus DTC Diversity show dramatically improved performance in common tactical situations using our diversity technology. Even with two receivers built into this rugged aluminum enclosure, the unit measures only 2" x 3" x 5.25".

Features

- ▲ DTC proprietary VideoVoter diversity technology
- ▲ Open Frame board level design reduces size, weight and cost
- ▲ Two receivers with ten user programmable video channels and two audio subcarriers per channel
- ▲ Audio subcarriers may be used to receive data
- ▲ RSSI available as analog voltage or discrete value
- ▲ Locking MTA connectors for quick connect/disconnect
- ▲ Internal encryption option
- ▲ Programming software and cable included

Options

- ▲ MicroViewlock II encryption

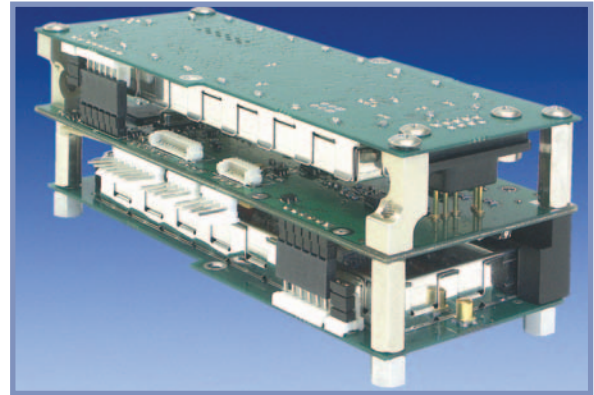
Models

- ▲ DVFR-1000-L 1700-1850 MHz
- ▲ DVFR-1000-S2 2200-2300 MHz
- ▲ DVFR-1000-S 2400-2500 MHz

Contact your DTC sales representative for other frequency bands which are not listed here

Add "ENC" to any of the above model numbers for Video Encryption

Add "ENC-AV" for Audio & Video Encryption



Specifications

RF

Operating Frequency Range	1700 – 1850 MHz 2200 – 2300 MHz 2400 – 2500 MHz
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Number of Channels	10 max. (user-programmable)
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Sensitivity @ 40 dB Video SNR	-83 dBm
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Input Impedance	50 ohms
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Video 1

Video Frequency Response	6 Hz – 4.5 MHz ±1 dB
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Output Impedance	75 ohms
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Video 2

Video Frequency Response	6 Hz – 7.5 MHz ±1 dB
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Output Impedance	75 ohms
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Audio

Number of Subcarriers	2 per video channel
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Subcarrier Frequencies	6 – 7.5 MHz (user-programmable)
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Tuning Step Size	10 KHz
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Power

Input Voltage	9 – 16 VDC
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Input Current	600 mA max. 650 mA max. (w/descramble enabled)
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Connectors

Video	4-pin MTA
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Audio	4-pin MTA
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RF	MMCX
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Programming	4-pin MTA
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Indicators

RSSI	Five-section LED; Part of membrane assembly; Indicates RF received signal strength
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Video Descrambler Clear/Scramble LED	Part of membrane assembly; Indicates status of descrambler module
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Encryption

Descrambling of Encrypted Video	Ovation Systems Micro Viewlock II (optional)
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Environment

Operating Temperature Range	-20° to +60° C ambient
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Mechanical

Dimensions	5.0" W x 3.00" D x 2.00" H
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Weight	.5 lb max
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Mounting Provisions	4-40 UNC female standoffs (6X)
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