



# DR28xxHD-P2

Sprite-Pro *Series 2*

## Two-way Diversity COFDM Receiver



### > Key Features

- Compact Digital Video Receiver
- DVB-T COFDM
- Dual RF Input Diversity – FFT/MRC
- Dual Mode Decoding: HD/SD H.264 and SD MPEG2
- High Definition HD-SDI Output
- HDMI Outputs (two)
- NTSC/PAL Composite Output
- Models Available from 1.7 to 6.525 GHz (in bands)
- Easy To Use Local Control Panel: 16 Programmable Presets
- BTP Decryption for Privacy
- Streaming Ethernet Output with KLV Metadata

### > Applications

- Fixed Concealments
- Overt/Covert Surveillance
- Unmanned Air Systems
- Unmanned Ground Robotics

### > Options

- Wide Variety of Antennas
- AES 128/256 Decryption (BCrypt1)
- BISS-1, BISS-E

The Sprite Pro diversity receiver is the latest addition to the popular Sprite Receiver Series. The Sprite Pro decodes both MPEG2 and H.264 compression and supports resolutions from 480i up to 1080i/60. The unit automatically configures

all COFDM parameters to match the received signal. Up to 16 configurable presets simplifies operation.



The Sprite comes ready to use as a table top unit. A 19" rack mount kit is included. The Sprite is small and light

enough to mount on the back of a monitor for remote display purposes. The unit is DC powered and comes with a universal AC transformer. Also included are two omni-directional antennas suitable for short range operation. Greater receive distances are easily achieved by substituting optional high gain or directional antennas.

Two HDMI outputs plug directly into most popular monitors and DVRs. An Ethernet streaming output is standard. Other outputs include CVBS, SDI, and HD-SDI.

Contact BMS to discuss your requirements.

> Technical Specifications

Frequency:	1.7-6.525 GHz (in bands, see ordering info); others available; contact BMS
Tuning Step Size:	250 KHz, 1 MHz (others available)
Frequency Stability:	± 2.5ppm
RF Inputs:	2, SMA(f) connector, each with selectable DC Bias (3-10 VDC, on/off)
RF Impedance:	50 ohm, 1.5:1 VSWR
Threshold:	-93 dBm @ QPSK
Decoding:	H.264 (MPEG4 Section 10/AVC) and MPEG2 (auto-selecting)
Video Outputs:	HDMI with audio (x2) (no HDCP) (See Table for SDI, HD-SDI)
DVB-ASI Input/Output:	EN50083-9
Ethernet Output:	RJ45, streaming media, control, configuration (MISB STD 0604.2 and STANAG 4609 compliant)
Demodulation Format:	COFDM (DVB-T) Unit Auto-Detects all COFDM and Decoding Parameters (except frequency)
Carriers:	2k
Constellation:	QPSK, 16 QAM, 64 QAM
Code Rate:	1/2, 2/3, 3/4, 5/6, 7/8
Guard Interval:	1/32, 1/16, 1/8, 1/4
Bandwidth:	6 MHz, 7 MHz, and 8 MHz
Audio Decoding:	ISO/IEC 13818-3 (Layer II)
Audio Frequency Response:	40 Hz to 10 kHz +/- 1.0dB
Audio Channels:	2 Mono, unbalanced outputs
Audio Output:	HDMI video/audio, ver. 1.3 (no HDCP)
Audio Level Adjust:	± 6 dB via front panel adjustment
Decryption (standard):	BMS Transmission Privacy (BTP)
Decryption (optional):	AES 128 or 256 bit (FIPS PUB 197, BCrypt1), BISS-1, BISS-E
User Data:	Three RS232 Side channel up to 19.2 k/Baud
Remote Control:	Remote RS232 and Ethernet
Local Control:	Local Control Panel with Receive Signal display
Presets:	16 user configurable presets through windows GUI.
RSSI:	Receive signal strength indicator; one log amp output per receiver
Input Voltage Range:	+10 to +32 VDC and 100-240 VAC 50-60 Hz with supplied AC/DC transformer
Power Consumption:	19 W or less, depending on mode
Temperature Range:	-30° to +60°C
Storage:	-40° to +70°C
Humidity:	0 to 95% non-condensing
Altitude:	
Operating:	20,000ft (6,000 m)
Non-operating:	50,000 ft (15,240 m)
Size:	1.40" H x 10.80" W x 5.45" D without connectors
Weight:	2.0 lb. 2 oz. (964 g)



> Ordering Information

MODEL	BAND (GHz)
DR2818HD-P2	1.700-1.900
DR2823HD-P2	2.200-2.400
DR2847HD-P2	4.400-5.000
DR2858HD-P2	5.700-5.900
DR2864HD-P2	6.425-6.525

Others available; contact factory

> Output Resolution

NTSC	525i	59.94
PAL	625i	25, 50
HD-SDI	720p	25, 50, 59.94, 60
HD-SDI	1080i	59.94, 60
HD-SDI	1080p	29.97, 30

