FEATURES/BENEFITS

- 4K UHD H.265 HEVC encoding and H.264 encoding
- HD-SDI capability
- Single-frame Encoder latency
- 12G-SDI / dual 6G-SDI / quad 3G-SDI input
- DVB-T with standard bandwidths and unique efficient 5MHz mode
- Dual pedestal capability for high quality requirements
- Dual frequency supports 2GHz and 7GHz for rental flexibility
- Mesh capable
- HD/SD video decoding in Mesh mode
- Optional camera control receiver
- 2×100mW output provides transmit diversity
- Multiple frequency band options

ECLIPSE
HEVC Broadcast Transmitter

Based around DBS's industry-leading 'Single Frame Encoder Latency' HEVC H.265 encoding technology, the Eclipse is a compact yet fully-featured outside broadcast transmitter.

Operating in DVB-T mode with Dual-Pedestal capability and 200mW output power, the Eclipse offers robust transmission in the most demanding of environments.

The Eclipse can transmit single 12G-SDI UHD video or four 3G-SDI HD video with embedded audio. It also offers dual high-performance stereo analogue audio inputs with phantom power, as well as the option of integrated UHF camera control.

The Eclipse can be provided with dual-frequency band support with 2GHz and 7GHz outputs in the same unit, making it the ideal solution in regions transitioning their frequency bands.

The superior HEVC encoding of the Eclipse coupled with our unique 5MHz modulation scheme allows operator to fit two wireless cameras into a 10MHz channel. This can be crucial as events become more immersive and require additional wireless cameras.

PRODUCT INFORMATION

Product Codes

ECLIPSE-xxxxxx	Eclipse OB transmitter, no battery plates
ECLIPSE-AB-xxxxxx	Eclipse OB transmitter, AB battery mount
ECLIPSE-V-xxxxxx	Eclipse OB transmitter, V battery mount
ECLIPSE-CCCAM-xxxxxx	Eclipse OB transmitter with camera control, no battery plates
ECLIPSE-AB-CCCAM-xxxxxx	Eclipse OB transmitter with camera control, AB battery mount
ECLIPSE-V-CCCAM-xxxxxx	Eclipse OB transmitter with camera control, V battery mount

Note: Camera control options below. xxxxxx denotes frequency, see over

Camera Control Options

ECLIPSE-VS-CCCAM-GV-UP	Grass Valley control software with interface cable
ECLIPSE-VS-CCCAM-HIT-UP	Hitachi control software with interface cable
ECLIPSE-VS-CCCAM-IKE-UP	Ikegami control software with interface cable
ECLIPSE-VS-CCCAM-PAN-UP	Panasonic control software with interface cable
ECLIPSE-VS-CCCAM-SON-UP	Sony control software with interface cable

Base Product Includes

CA0579	Audio 5-way circular to XLR cable

CCCAM Product Includes

AP008822	Telemetry antenna SMA, 433MHz
CA3919	CCCAM Ethernet cable

Accessory Options (sold separately)

Antennas L/S/C-Band	Various N-type to match frequency
CA0340	RS-232 data 4-way circular to 9-way D-sub cable
CA0579	Additional audio 5-way circular to XLR cable
CA3421	Power 4-way circular cable to 15V 90W PSU
CA3348	HD-BNC right-angle to BNC cable
ECLIPSE-KIT-AB	AB-mount battery plate kit
ECLIPSE-KIT-V	V-mount battery plate kit

TECHNICAL SPECIFICATION

IO

RF COFDM transceivers	N-type (f) x 2 (2×100mW)
RF COFDM transmitter (dual-band variant only)	N-type (f) x 1 (200mW)
3G/12G-SDI bi-directional (SD/6G-SDI)	HD-BNC (SDI1)
3G-SDI bi-directional (SD/6G-SDI)	HD-BNC x 2 (SDI2/3))
3G-SDI input (SD/6G-SDI)	HD-BNC (SDI4 in)
SD/HD/3G-SDI output (6G-SDI)	HD-BNC (SDI4 out)
SFP socket	SFP slot (12G-SDI MSA compliant)
ASI input	HD-BNC
ASI output	HD-BNC
Serial data and power output	4-way circular
Power input	4-way circular
Balanced audio input	5-way circular x 2
Battery pass-through	V-Lock or Anton Bauer plates
Ethernet	RJ45
USB 2.0 host	USB type-A

Camera Control Option

Camera interface	14-way circular
Tally	5-way circular
RF input	SMA (403-473MHz)

DVB-T Modulation

DVB-T bandwidths	8MHz, 7MHz, 6MHz and unique 5MHz modes
UVML bandwidths	8MHz, 7MHz, 6MHz and 5MHz modes
DVB-T dual pedestal	2×8MHz, 2×7MHz and 2×6MHz modes
DVB-T FEC	1/2, 2/3, 3/4, 5/6, 7/8
DVB-T constellation	QPSK, 16QAM, 64QAM
DVB-T guard interval	1/4, 1/8, 1/16, 1/32
DVB-T bitrates	3.732Mbps to 50Mbps

Input Video Format

HD input format	SMPTE-292M/424M
	1920×1080i 60/50Hz 59.94Hz
	1920×1080p 60/59.94/50/30/29.97/25/24/23.97Hz (1920×1080psf 30/29.97/25/24/23.97Hz)
	1280×720p 60/59.94/50/30/29.97/25/24/23.97Hz

TECHNICAL SPECIFICATION cont

Ultra HD input format	SMPTE ST-2081/2082 3840×2160p 60/50Hz (59.94/30/29.94/25/24/23.97Hz)

Encoder

HEVC compression	HEVC/H.265/MPEG-H Part 2 8-bit or 10-bit, 4:2:0 or 4:2:2
H.264 compression	AVC/H.264/MPEG-4 Part 10

Audio

Analogue audio input	Two balanced analogue stereo pairs from -60dBu to +18dBu
Analogue phantom power	12V/48V
Digital audio input	1.5G/3G/12G-SDI de-embedding (SD/6G-SDI)
Sample rate	48kHz
Coding modes	Up to eight channels (2 pairs) LPCM 16-bit (20/24-bit) AAC MP1 layer 1/2

Other

RS232 data input	1k2 to 115k2, 7/8 bit, no/odd/even parity
Control panel	Built-in OLED with six buttons

Encryption

Standard	ABS 32-bit
Licensed	AES 128/256-bit (subject to export control)

Power

DC input	9.2V to 17.8V reverse polarity protected
Power consumption	Less than 25W typ. @100mW RF power with 4K video

Environment

Temperature range	-10°C to +50°C
Humidity	Less than 85% non-condensing

Physical

Dimensions	L 181mm (165mm excluding connectors) W 110mm D 46mm (without battery plates) or D 85mm (with V-Lock plates) or D 77mm (with Anton Bauer plates)
Dimensions (dual band)	L 193mm (177mm excluding connectors) W 115mm D 46mm (without battery plates) or D 85mm (with V-Lock plates) or D 77mm (with Anton Bauer plates)
Weight	1.4kg (approx.)

Frequency

114150	1.14-1.50GHz
167235	1.67-2.35GHz
198270	1.98-2.70GHz
440500	4.40-5.00GHz
550600	5.50-6.00GHz
198750D	1.98-2.70GHz + 6.40-7.50GHz

Software License Code

SILVER (included)	DVB-T Modulation, Streaming, HD H.264 and HD H.265 Encoding
ECLIPSE-GOLD	4K UHD Encoder and 4x HD Video services
LIC-DP-TX	Dual Pedestal modulation

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