Event HD

Digital ENG Transmission Optimized for Broadcasters

Moseley

Live action doesn't wait.

The **Event HD** ENG Link provides users with options of multiple HD-Video or SD-Video over DVB-ASI with data rates up to 155 Mbps[‡]. The superior modulation together with Reed-Solomon and Trellis-Coded Error Correction provide unparalleled error-free performance.

Event HD Outdoor Unit

FEATURES

- 1.5GHz to 13GHz in Bands
- High Data Rates for HD Video
- Frequency Agile
- Configurable bandwidth and data rates by customer
- Upgradable to Duplex
- Optional diversity receiver
- Maintain Video SNR with changes in Receive Signal Strength
- Portable/Tripod mountable Outdoor Unit
- Dual Error Correction system
- Built in Web Server
- SNMP-based monitoring system

FLEXIBLE MODULARITY

The Event HD is designed modularly and affords complete flexibility and control in any situation. It conforms to global standards, ensuring an array of possibilities now and in the future filled with innovation and enhancement.

SPECTRUM SCALABILITY

The only digital radio of its kind; the Event HD allows the user to specify its occupied spectrum according to the operational data rate. This ability offers operators full network design flexibility and optimal use of limited frequencies.

PROGRAMMABLE SPECTRAL EFFICIENCY

The Event HD can be configured for 4 QAM, 16 QAM, 32 QAM, QAM, 64 QAM and 128 QAM dependant on RF Units. This allows operators to trade spectral efficiency for system gain as location requirements change.

OPTION RICH

The Event HD features many optional enhancements, such as DVB-ASI, Digital Audio, Orderwire, Auxiliary Channel, Ethernet and others, providing a multitude of possibilities to fulfill any broadcast video networking requirements.

Event HD indoor unit
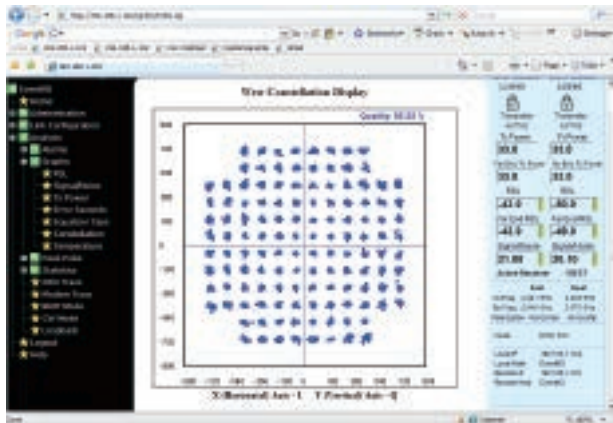
UNPARALLELED ROBUSTNESS

To overcome industrial and other man-made impulse noise as well as other burst-mode interferences, powerful Reed-Solomon and Trellis-Coded Error Correction is standard. Unfaded BER error-free performance in excess of 10^{-12} is unparalleled.

An interleaver further enhances error concealment. In addition, an adaptive equalizer overcomes multipath and other channel impairments.

INHERENTLY ADAPTIVE

The Event HD excels in many applications, including Studio-to-Transmitter and Transmitter-to-Studio Links, and ENG/Satellite Backhaul.

NETWORK MANAGEMENT

Web-based interface

The Event HD provides superior Network Management capability with its built-in Web Server and SNMP software. Unmatched system analysis and monitoring can be utilized to create multilevel system alarms. Remote monitoring and control of your entire microwave network is simplified. System security is paramount; the Event HD features multilevel configuration permissions and network data encryption. Accounting and logging features provide protection and information about access attempts.

So why should you?

SYSTEM

FREQUENCY	1.5GHz to 13GHz in Selected band (fully synthesized)*
STEP SIZE	500 kHz
DATA RATES	*For selected examples, see table below.*
MODULATION	4, 16, 32, 64, and 128 QAM (dependent of RF consult factory) *For selected examples, see table below[‡].*
TEMPERATURE RANGE	Full performance: 0° to +50°C
POWER SOURCE	48 VDC or 115/230 VAC 80 W nominal
DIAGNOSTICS	Local and remote status and control. Monitoring of BER, RSL, Alarms, Status, and Historical information via Web-Server and SNMP
INTERFACES	DVB-ASI, 100Base-T, T1, E1
UNFADED BER	1×10^{-12}
ERROR CORRECTION	Trellis-Coded Modulation concatenated with Reed-Solomon Coding + Trellis-Coded Correction 1/2, 3/4, 5/6, 7/8, 9/10
PROTECTION	Space, Frequency, or Cold/Hot Standby
STANDARDS	ETS 300 385 EMC/EMI, and FCC part 74/94/101

For other frequencies, consult factory. [‡]Note dependent on Bandwidth.

TRANSMITTER

TYPE	Superheterodyne Conversion
FREQUENCY	1.5GHz to 13GHz in Selected band (fully synthesized)*
POWER OUT	5 Watt 16QAM @ 2 GHz and 1 Watt 6.5, 6.7-7.6 GHz. For 18, 23GHz 23dBm for 16QAM. *For high power, consult factory.*
STEP SIZE	500 KHz
OCCUPIED BANDWIDTH	6-50 MHz, dependent on operating mode and modem option
MONITORING	Local Web Server with SNMP with Programmable Relays
TUNABLE BANDWIDTH	100 MHz (400 MHz optional)

RECEIVER

TYPE	Superheterodyne Conversion
FREQUENCY	1.5GHz to 13GHz in Selected band (fully synthesized)*
RECEIVE SENSITIVITY	-82 dBm (typical, depending on data rate/modulation) *For selected examples, see table below.*
STEP SIZE	500 KHz
CHANNEL BANDWIDTH	6 - 50 MHz dependent on operating mode and modem option
MONITORING	Local Web Server with SNMP with Programmable Relays

EVENT HD-2200

Selected examples only. For a specific listing, please consult your Moseley sales representative.

MODULATION	CODE RATE	DATA RATE (Mbps)	BANDWIDTH (MHz)	FCC CODE	THRESHOLD (dBm)
16 QAM	3/4	27	12	12MOD7W	-84
16 QAM	7/8	32	12	12MOD7W	-82
32 QAM	4/5	36	12	12MOD7W	-78
32 QAM	9/10	41	12	12MOD7W	-78

EVENT HD-6500

MODULATION	CODE RATE	DATA RATE (Mbps)	BANDWIDTH (MHz)	FCC CODE	THRESHOLD (dBm)
16 QAM	3/4	57	25	25MOD7W	-80
16 QAM	7/8	67	25	25MOD7W	-79
32 QAM	4/5	76	25	25MOD7W	-74
32 QAM	9/10	85	25	25MOD7W	-73