

# Event 5800



## High Capacity Bidirectional Studio Transmitter Link

**Moseley**

# STL/TSL: Get the payload advantages...



*Event 5800 Indoor Unit*

## TAKE ADVANTAGE OF HIGH PAYLOAD CAPACITY

Moseley **Event 5800** provides up to nine bidirectional T1 or eight E1 circuits. Multi-station clusters can transport linear uncompressed 20 kHz digital audio for a truly cost effective multi-station Studio Transmitter Link.

**Event 5800** is fully bidirectional. This means audio from remote pickup equipment, and satellite delivered programming can be transported inbound from the transmitter site over the same link.

## HD RADIO™ READY TODAY

**Event 5800** meets all the requirements for IBOC digital radio. **Event 5800** transports AES/EBU digital uncompressed audio at 44.1 or 32 kHz sample rates along with Ethernet data to provide all the signals necessary for the HD1, HD2, HD3 multicasting, and datacasting services. With **Event**, stations get the most out of HD Radio™ conversion now and in the future.

### CARRIER CLASS TRANSPORT

- Distances 20 miles or greater
- External High Gain Antenna
- ISM 5.8 GHz unlicensed band
- U-NII 5.3 GHz unlicensed band
- Adaptive Power Control
- Powerful Reed-Solomon Error Correction
- 1+1, 2+0 Redundancy
- Advanced diagnostics

The Moseley **Event 5800** is a carrier class T1/E1/IP Ethernet radio link. The Starlink SL9003T1 combined with the **Event 5800** creates a high capacity bidirectional STL/TSL.

## LEVERAGE LATEST ADVANCES IN IP TECHNOLOGY

New and innovative IP based applications and appliances can promote station efficiency. The **Event 5800** provides an Ethernet channel to extend the station IP LAN/WAN network the transmitter site.

Surveillance and security cameras, IP transmitter site monitoring and remote control reduce down-time and protect valuable station assets. Sites can be accessed remotely and over the Internet saving personnel travel time to the site.

Mirrored servers located at transmitter sites can back up business records and programming content off-site. In the case of an evacuation or disaster at the studio building, stations get back on the air quickly from temporary facilities.

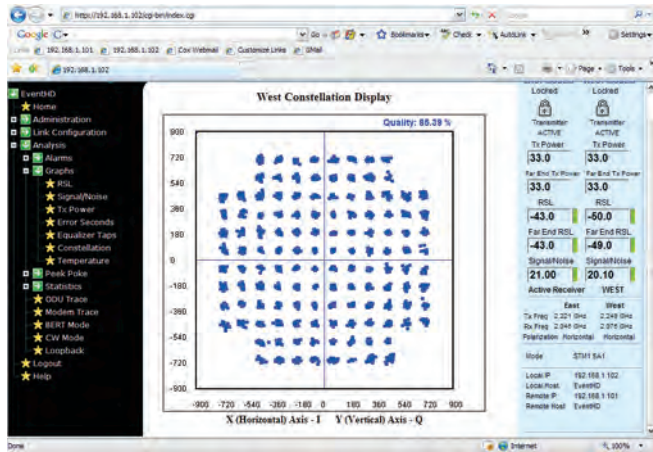
Email and Internet connections at transmitter sites save engineers time accessing manuals or help from manufacturers during a maintenance session.

## INTELLIGENT SYSTEM DESIGN

**Event 5800** consists of a Software Defined Indoor Unit and an Outdoor Unit. The **Event 5800** radios are spectrum and data rate scalable, which enables broadcasters to have greater flexibility in STL planning and future growth. The integrated T1/E1 and Ethernet interfaces allow for a combination of T1/E1 and IP packet data.

## QUICK DEPLOYMENT

**Event 5800** operates in the ISM 5.8 GHz and U-NII 5.3 GHz unlicensed bands. The overcrowded 950 MHz licensed STL band can be avoided. Time consuming frequency coordination and licensing costs and delays are not required. A new STL system can be up and running quickly and cost effectively.



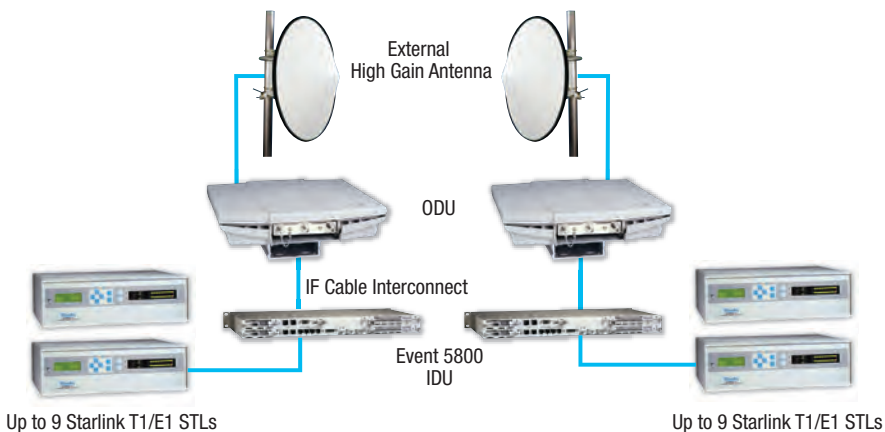
Web-based Interface

## EXCELLENT RETURN ON INVESTMENT

Event 5800 eliminates multiple leased audio, voice and data lines to and from transmitter sites. This results in significant savings in monthly recurring costs. So, in addition to providing the highest quality STL possible, Event 5800 pays for itself in a very short time.

## SOPHISTICATED NETWORK MANAGEMENT

The Event 5800 provides superior Network Management capability with its built-in Web Server and SNMP software. Unmatched system analysis and monitoring can be utilized to create multi-level system alarms. Remote monitoring and control of your entire microwave network is simplified. System security is paramount; the Event 5800 features multi-level configuration permissions and network data encryption. Accounting and logging features provide protection and information about access attempts.



## HIGH PAYLOAD CAPACITY

- Multi-station clusters
- HD Radio™ and Multicasting
- LAN/WAN extension to site
- Backhaul RPU and SAT downlink

## UNEQUALLED AUDIO PERFORMANCE

- Linear uncompressed audio
- HD Radio™ & Multicasting
- AES/EBU Digital or Analog (L+R) inputs & outputs
- 32, 44.1, or 48 kHz sample rates
- Low delay
- Built in RS-232 data channels

## 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.

MOSELEY ASSOCIATES IS THE LEADER IN DIGITAL STL TRANSMISSION SYSTEMS FOR THE BROADCASTING INDUSTRY. FOR MORE INFORMATION VISIT US AT [www.moseleysb.com](http://www.moseleysb.com).

# ...of digital T1/E1 in an RF microwave STL.

### RF SPECIFICATIONS

<b>FREQUENCY RANGE</b>	ISM: 5.725 - 5.850 MHz U-NII: 5.250 - 5.350 MHz
<b>CAPACITY OPTIONS</b>	T1: up to 9 E1: up to 8 Ethernet: 27 Mbps <i>Capacity also includes additional 1 Mbps full duplex Ethernet capacity for NMS traffic</i>
<b>AVERAGE OUTPUT POWER</b>	ISM +5 to +23 dBm U-NII -18 to +5 dBm
<b>RECEIVE SENSITIVITY</b>	-84 dBm to -80 dBm (E1/T1) -84 dBm to -70 dBm (Ethernet)  Receiver sensitivity varies per selected frequency and modulation
<b>ANTENNA</b>	Uses external antenna for higher gain
<b>ANTENNA CONNECTOR</b>	N-Type Female
<b>REGULATORY</b>	FCC Part 15 IC: RSS210
<b>POWER</b>	-48 Volts $\pm$ 10%, <70 Watts; Optional 100-240 Volts AC, 47-63 Hz power supply
<b>OPTIONAL FEATURES</b>	Integrated cross connect for E1/T1; add/drop mux for SDH; single chassis 1+1, 2+0 option.

### NETWORK MANAGEMENT

Supports SNMP, built-in web server  
Connector RJ-45, 10/100BaseTX

### DATA INTERFACE

<b>PHYSICAL</b>	Ethernet - 100BaseTX N x E1/T1 - Full duplex E1/T1
<b>CONNECTOR</b>	Ethernet RJ-45 N x E1/T1 2 x RJ-48C, HD60

### OPERATING FEATURES

<b>WAYSIDE CHANNELS</b>	T1/E1
<b>INTERFACE</b>	DSX-1 Connector RJ-48C
<b>ALARM PORT</b>	Two Form C relay alarm outputs, 2 TTL outputs
<b>VOICE SERVICE CHANNEL</b>	6-wire, PTT handset
<b>DATA SERVICE CHANNEL</b>	64 kbps

### ENVIRONMENTAL CHARACTERISTICS

<b>TEMPERATURE</b>	IDU -5° to 55°C ODU -30° to 55°C
<b>RELATIVE HUMIDITY</b>	IDU 0 to 95%, non-condensing ODU Up to 100% at 45°C
<b>ALTITUDE</b>	IDU 4500 meters ODU 4500 meters
<b>SIZE</b>	IDU 1RU, ETSI compliant, (445 x 238.5 x 44.5 mm) rack mount (19 inches, 48.2 cm)  ODU 39.5 x 36.5 x 5.5 cm
<b>WEIGHT</b>	IDU 7 lbs. ODU 15 lbs.
<b>COMPLIANCE</b>	Ethernet IEEE 802.3 N x E1/T1 ITU-T

### COMMON CONFIGURATIONS

Build your station's perfect mix of T1/E1 and Ethernet payload, for example:

- 9 T1 circuits and 5 MBPS Ethernet data
- 5 E1 circuits and 10 MBPS Ethernet data
- 3 E1 circuits and 15 MBPS Ethernet data

The Moseley sales team can custom configure your Event 5800.



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