The Loma Scientific International STE series of transmitters provide broadband MMDS operators with a technically proven solution for cost sensitive wireless cable broadcast television applications. Enhanced amplifier linearity circuits provide overall improvements in CTB performance and picture quality. This coupled with flexibility of choice for different modulation formats and arbitrary channel loading assignments make these transmitters simple to operate and maintain. The multi-channel up-conversion architecture can be factory preset to meet any requirement, and field replacement or addition of modulators can be accomplished easily with little or no down-time.

**STE Series Broadband Transmitter Specifications**

- **Operating Frequency**: 2500~2686 MHz (2.0~2.7 GHz available)
- **Maximum Number of Channels**: (33) 6 MHz FCC (NTSC) or CCIR (PAL-N) channels (25) 8 MHz CCIR G, I and K (PAL/SECAM) channels
- **Composite Triple Beat (CTB)**: -50 dBC maximum with unmodulated carriers -55 dBC typical with modulated carriers
- **Signal to Noise Ratio**: 55 dB
- **IF Input Level**: -6 to -26 dBm (222~408 MHz) Note 1
- **Conversion Gain Flatness**: +/- 2dB (186 MHz bandwidth)
- **Input Impedance**: 75 Ohm - BNC or "F" connector
- **Output Impedance**: 50 Ohm - N connector
- **Ambient Operating Temperature**: +10 to +40 degrees centigrade
- **Relative Humidity**: 95% maximum, non-condensing
- **Power Requirements**: 120/220 VAC, 50/60Hz

<table>
<thead>
<tr>
<th>LSI Model</th>
<th>IP3 Power</th>
<th>P1dB Power</th>
<th>Power/Channel</th>
<th>Power/Channel</th>
<th>Power/Channel</th>
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<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Third Order Intercept</td>
<td>Equivalent Final *</td>
<td>@8channels</td>
<td>@16channels</td>
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<tr>
<td>58D STE</td>
<td>12KW</td>
<td>800W</td>
<td>36dBm</td>
<td>33dBm</td>
<td>32dBm</td>
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<td>6.3KW</td>
<td>400W</td>
<td>33dBm</td>
<td>30dBm</td>
<td>29dBm</td>
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<tr>
<td>38 STE</td>
<td>3.2KW</td>
<td>200W</td>
<td>30dBm</td>
<td>27dBm</td>
<td>26dBm</td>
</tr>
<tr>
<td>28A STE</td>
<td>2.0KW</td>
<td>100W</td>
<td>27dBm</td>
<td>24dBm</td>
<td>23dBm</td>
</tr>
<tr>
<td>18A STE</td>
<td>1.0KW</td>
<td>50W</td>
<td>24dBm</td>
<td>21dBm</td>
<td>20dBm</td>
</tr>
</tbody>
</table>

* (16) channel Class-A comparison test
## General and Mechanical Specifications

<table>
<thead>
<tr>
<th>Model Number</th>
<th>AC Power Consumption</th>
<th>Dimensions (W&quot; x H&quot; x D&quot;)</th>
<th>Weight (lbs.)</th>
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</thead>
<tbody>
<tr>
<td>58 STE</td>
<td>480VA</td>
<td>19 x 7.00 x 24</td>
<td>35</td>
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<tr>
<td>38 STE</td>
<td>260VA</td>
<td>19 x 5.25 x 8.5</td>
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<td>28A STE</td>
<td>120VA</td>
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<tr>
<td>18A STE</td>
<td>75VA</td>
<td>19 x 5.25 x 8.5</td>
<td>15</td>
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</tbody>
</table>

**Example (16) Channel System Configuration**

- Headend
- Modulator/Combiner Rack
- Baseband Input
  - (16) video
  - (16) audio
- STE Series Transmitter
  - Broadcast Antenna
- Receiver/Downconverter

Specifications are subject to change.

**Notes**
1. For Customer supplied headends, contact sales for proper IF (input) drive levels.
2. Contact sales for other channel loadings or other modulation (including digital) formats.
3. 58D = Dual 58STE Option. Contact Sales for information regarding (2) transmitters and (2) antennas.
4. For any features not listed here please contact LSI Sales.

Loma Scientific International (LSI) is the world leader in MMDS transmitter sales with Wireless Cable Systems deployed in more cities and countries than by any other firm. LSI products enable Pay TV and "free to air" television programming to be delivered in any market, FCC or CCIR, faster and easier and at very low cost compared to traditional CATV (hardwired) systems installations. MMDS services can also provide alternative video, voice and data solutions that may already be served by cable.

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