Instruments for Industry, SCCXL-Series Amplifiers provide outstanding RF performance. These products are available in a wide range of power levels from 10 watts to 1200 watts in the 10KHz - 100MHz frequency range. These state-of-the-art solid-state power amplifiers are specifically designed for laboratory and all testing applications.

IFI RF amplifiers are very conservatively designed to operate below maximum ratings for ruggedness and long term reliability. Sixth generation LDMOS Transistors provide reliable brute-power performance at frequencies up to 100MHz.

Our RF power amplifiers feature individually shielded aluminum assemblies for the module level. This concept of a shielded modular design minimizes internally produced EMI signal leakage and provides easy access for field service and rapid turnaround at depot level repair facilities.

From the ground up, the “SCCXL-SERIES” products are structurally engineered to withstand operation in mechanically hostile environments. Ruggedized versions are available for applications that will be exposed to very harsh environments.

**Features**
- Solid State Design
- Rugged Construction & High Reliability
- Instantaneous Broadband Frequency range
- Backlit screen
- Modular Design Construction
- Integrated Force Air Cooling
- Self-diagnostic circuitry
- IEEE-488 interface & RS232 Remote

### Models & General Specifications

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Frequency Range (MHz)</th>
<th>Rated Power (Watts) Minimum</th>
<th>P1dB Power Watts Minimum</th>
<th>Gain (dB) Minimum</th>
<th>KVA</th>
<th>Weight In Pounds</th>
<th>Size In Inches</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCCXL10</td>
<td>10KHz – 100MHz</td>
<td>10</td>
<td>10</td>
<td>40</td>
<td>.1KVA</td>
<td>33 Lbs</td>
<td>5.25&quot; H x 19&quot; W x 24&quot; D</td>
</tr>
<tr>
<td>SCCXL25</td>
<td>10KHz – 100MHz</td>
<td>25</td>
<td>25</td>
<td>44</td>
<td>2KVA</td>
<td>35 Lbs</td>
<td>5.25&quot; H x 19&quot; W x 24&quot; D</td>
</tr>
<tr>
<td>SCCXL50</td>
<td>10KHz – 100MHz</td>
<td>50</td>
<td>50</td>
<td>47</td>
<td>4KVA</td>
<td>36 Lbs</td>
<td>5.25&quot; H x 19&quot; W x 24&quot; D</td>
</tr>
<tr>
<td>SCCXL100</td>
<td>10KHz – 100MHz</td>
<td>100</td>
<td>80</td>
<td>50</td>
<td>.5KVA</td>
<td>38 Lbs</td>
<td>5.25&quot; H x 19&quot; W x 24&quot; D</td>
</tr>
<tr>
<td>SCCXL150</td>
<td>10KHz – 100MHz</td>
<td>150</td>
<td>100</td>
<td>52</td>
<td>.8KVA</td>
<td>40 Lbs</td>
<td>5.25&quot; H x 19&quot; W x 24&quot; D</td>
</tr>
<tr>
<td>SCCXL200</td>
<td>10KHz – 100MHz</td>
<td>200</td>
<td>160</td>
<td>53</td>
<td>1.5KVA</td>
<td>80 Lbs</td>
<td>14.0&quot; H x 19&quot; W x 27&quot; D</td>
</tr>
<tr>
<td>SCCXL250</td>
<td>10KHz – 100MHz</td>
<td>250</td>
<td>200</td>
<td>54</td>
<td>2.0KVA</td>
<td>90 Lbs</td>
<td>14.0&quot; H x 19&quot; W x 27&quot; D</td>
</tr>
<tr>
<td>SCCXL350</td>
<td>10KHz – 100MHz</td>
<td>350</td>
<td>280</td>
<td>56</td>
<td>2.5KVA</td>
<td>95 Lbs</td>
<td>14.0&quot; H x 19&quot; W x 27&quot; D</td>
</tr>
<tr>
<td>SCCXL500</td>
<td>10KHz – 100MHz</td>
<td>500</td>
<td>300</td>
<td>57</td>
<td>3.0KVA</td>
<td>100 Lbs</td>
<td>14.0&quot; H x 19&quot; W x 27&quot; D</td>
</tr>
<tr>
<td>SCCXL800</td>
<td>10KHz – 100MHz</td>
<td>800</td>
<td>500</td>
<td>60</td>
<td>5.0KVA</td>
<td>400 Lbs</td>
<td>Rack Integrated</td>
</tr>
<tr>
<td>SCCXL1200</td>
<td>10KHz – 100MHz</td>
<td>1200</td>
<td>800</td>
<td>62</td>
<td>10.0KVA</td>
<td>650 Lbs</td>
<td>Rack Integrated</td>
</tr>
</tbody>
</table>
Standard Features for IFI SCCXL-Series Solid State Amplifiers

**Standard Features:**
- VSWR Reflected Power Protection, the unit operates without damage or oscillation into any magnitude of phase or load impedance, Open & Short Circuit Protection.
- GPIB IEEE 488 & RS232 Remote Control
- RF Sample Port on the Front Panel, 112R for rear panel
- Internal Pre-amplification to obtain rated output power with an input level of 0 dBm or less.
- Gain Control Local & Remote, 30dB range
- RF Input/Output Connectors on the Front Panel, 118R for rear panel
- Internal Systems Diagnostics & Status Indicators
- Total/Operate Elapsed Time Metering in hours
- RF Safety Interlock
- Forward/Reflected Power Indication simultaneously on Front Panel display

IFI SCCXL-Series Solid State Amplifier Specifications

**Frequency Range:** As Specified in Model Table
**Rated Output Power:** As Specified in Model Table
**Gain @ Rated Power:** As Specified in Model Table
**Prime Power:** As Required (Some are listed below)
**Input/output Impedance:** 50 ohms
**RF Input/ Sample Connectors:** Type N Female, unless specified otherwise
**RF Output Connector:** Type N Female
**Other connectors available by request or specification**
**Input VSWR:** 2.0:1
**Output VSWR:** 2.5:1
**Operating Temp:** 0º to 50º C
**Non-operating Temp:** -40º to 70º C (50,000 feet max)
**Humidity:** 95% without condensation
**Altitude:** 10,000 feet
**Cooling System:** Air cooled, self-contained
**Modulation:** AM,FM, Pulse
**Configuration:** Rack Mount as specified in Model Table, or Rack/Cabinet Integrated
**Spurious Outputs:** < -60 dBc nominal
**Harmonics:** -20dBc minimum @ Linear Power

Standard Prime Powers:
- 100, 115, 120 VAC ±10% 50/60 Hz, single phase
- 220, 230, 240VAC ±10% 50/60 Hz, single phase
- 100/110/115/120 ±10% 50/60 Hz, three phase Wye or Delta power is available
- 200/220/230/240VAC ±10% 50/60 Hz, three phase Wye or Delta power is available

Special Prime Powers other then listed are subject to availability

Some Available Options for IFI SCCXL-Series Solid State Amplifiers

**Option 110-1E:** GPIB IEEE-488 RS232 and Ethernet Remote Control
**Option 110-2:** GPIB IEEE-488 and RS 422 Remote Control
**Option 110-3** GPIB IEEE-488 and RS 485 Remote Control
**Option 113:** Chassis slides for a 19” rack mounting
**Option 118A:** RF Input On Front Output On Rear
**Option 118B:** RF Input On Rear Output On Front
SCCXL Solid State RF Power Amplifiers
10 KHz – 100 MHz • 10 to 1200 watts, Minimum Rated Power

Outline Configurations:

5.25” High Chassis

14” High Chassis
SCCXL Solid State RF Power Amplifiers
10 KHz – 100 MHz • 10 to 1200 watts, Minimum Rated Power

Rack Outline Configurations: