Mission Critical Systems
Ensuring Land Mobile Network Reliability
Reliable Communication Key for Land Mobile Radio

Working with key OEMs and regulatory agencies for more than 40 years, PolyPhaser and Transtector Systems have developed an established reputation of providing dependable P25 and TETRA-compliant surge protection solutions for global LMR applications, enabling secure, reliable and interoperable networks when they are needed most.

<table>
<thead>
<tr>
<th>Application</th>
<th>Network Component</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dispatch</td>
<td>Dispatch Console</td>
<td>Dispatching and operations logging; reliability critical for interface and safety</td>
</tr>
<tr>
<td>Master Site, Backup Site</td>
<td>Base Station Rack and Combiner</td>
<td>Data storage and backup for reliable communications</td>
</tr>
<tr>
<td>Remote Site</td>
<td>Network MUX, Switches, Modems</td>
<td>Extends range of the network</td>
</tr>
<tr>
<td>Master Site</td>
<td>Server Rack, Switches</td>
<td>Operations reliability</td>
</tr>
<tr>
<td>Master Site</td>
<td>Equipment Room</td>
<td>Panel entrance location</td>
</tr>
<tr>
<td>Master Site/Remote Site</td>
<td>Tower</td>
<td>Communication for master, backup and remote site operations (PTP radios, TTA, GPS*)</td>
</tr>
<tr>
<td>Remote Operations</td>
<td>Dispatch and Secondary Operations</td>
<td>Extends range of the network</td>
</tr>
</tbody>
</table>

*Note: PolyPhaser SPD applications are dependent on: frequency, connector type, DC pass or DC block configuration, or when sensitivity to PIM is high.

AC Surge Protection

- OP8
- APEX IMAX
- SL-120
- RMP 615A

DC Surge Protection

- DRDC
- 3DC48-20
- I2R SA48-40
- DCOD

Premier Surge Protection Vendor for Land Mobile Radio

- Surge protection products designed to meet R56 standards.
- Preferred Motorola Solutions vendor – ranked as a top ten supplier for the past five years.
- Global expertise in providing power quality site audits.
- Motorola-certified auditor as part of the Customer Service team within Transtector.
- Technical service well versed in LMR compliance issues and standards.
- Tailored Product Expedite (TPE) Program – Designed to provide application-specific surge protection solutions, through modification or enhancement of a current product.
- Low PIM rated RF products certified to Motorola and Verizon standards, N and DIN connector products available.
### Surge Protection Required

**Recommended Surge Protection**

- **AC, DC, Data, RF**
  - TSJ, AC Edge, RMP 615A, OP8, DRDC

- **AC, DC, RF**
  - AC Edge, OP8, TSX, TUSX, VHF50, ISB50, CPX, DC Edge III

- **Data -- Ethernet (T1/E1), AC**
  - CPX, TSJ, RMP 615A

- **Redundant power supplies AC or DC**
  - TSJ, CPX, AC Edge, OP8, Site Audits

- **AC, DC, Data**
  - APEX IMAX, ISP Panel, TSJ, FSP, I2R, DCOD

- **AC, Data & RF (coaxial entry), Ethernet POE**
  - Frequency and connector dependant, Site Audits

- **AC, Data, RF**
  - TSJ, CPX, SL-120, OP8, AC Edge, DC Edge III, RMP 615A, PEEP, Site Audits

### Committed to Service

Meeting our customers’ requirements is paramount to our effort in creating highly satisfied customers. We are the only surge protection supplier that offers a full line of professional services, including:

- **Technical Support**—Our global engineering service teams are available to answer application questions, troubleshoot, or assist in the design and development of a custom solution.

- **Customer Service**—Dedicated inside sales and customer service teams are trained in the unique surge protection requirements for LMR applications. These seasoned teams provide a full range of support from helping to select the right product to providing order status and RMA assistance.

- **Consulting and Site Audits**—We bring more than 30 years of expertise and professional experience in power and grounding consulting, site audits and educational courses to our worldwide Land Mobile Radio customers.

- **Custom Engineered Solutions**—Experts in transient technology and standards required for custom Motorola R56, P25 and TETRA-compliant surge protection solutions.
About Smiths Power

Smiths Power is a leading supplier of power distribution, conditioning, protection and monitoring solutions for data centers, wireless communications and other critical or high-value electrical systems.

As a family of brands, PDI, ONYX, PolyPhaser, Transtector, LEA, and RO Associates unite under one umbrella to Transform, Distribute, Monitor and Protect™ power in global networks and systems. Our companies provide expertise in consulting, design and manufacturing of power transformers and distribution systems, static switching, power monitoring, RF, AC, DC, data signal and EMP protectors as well as power quality engineering services.

Alongside Smiths Connectors and Smiths Microwave, Smiths Power is part of the Smiths Interconnect division of Smiths Group (www.smiths.com), a global leader in applying advanced technologies for markets in threat and contraband detection, energy, medical devices, communications and engineered components. Smiths Group employs approximately 23,000 people in more than 50 countries.