



## Mission Critical Systems

Surge Protection for Small Cell Networks

## Reliable Protection – Guaranteed

Small cell network protection requirements are vast, based on the wide range of air interfaces including GSM, CDMA, LTE, WiMax, 3G and 4G. As industry leaders in RF, AC, DC and data line surge protection, our sales and engineering teams are well versed in the specific challenges, requirements and specifications for this market.

Application	Network Component	Value
<b>Enterprise</b> Campuses Airports Stadiums	Power supply, access controller/gateway, 3G & 4G radios	Extends wireless access coverage; private or multi-carrier networks
<b>Urban/Metro</b> Building Density Residential	Power supply, access controller/gateway, 3G & 4G radios, microwave link option	Extends carrier wireless access coverage within congested urban areas
<b>Rural/Micro</b> Remote Locations Residential	Power supply, access controller/gateway, 3G & 4G radios, microwave link option	Extends carrier wireless access coverage
<b>WiFi-802.11</b> Coffee Shops Hotels Commercial	2.4Ghz and 5.8Ghz radios	Provides data access from 50-200 feet, Indoor/Outdoor
<b>WiMAX</b> Outdoor Subscriber Based Rural	2.3Ghz to 3.8Ghz radios	Provides data access 5-30 miles, Outdoor

### AC



RMP Series



I2R ICP Series



I2R IEP Series



MCP

### DC



DRDC



I2R ICP-24/48



DC Defender



IX-DC Series

## Premier Surge Protection Vendor for Mobile Network Operators

Small cells require a unique protection solution due to in-building and outdoor wireless service. Mobile operators trust and depend upon the reliable surge protection solutions PolyPhaser and Transtector Systems provide for LTE networks.

- Superior protection products engineered to protect small cell locations including residential, enterprise, urban and rural.
- Engineering teams integrate global electrical standards and the appropriate suppression technology into both custom and commercial off-the-shelf product designs.
- Preferred vendor status – ranked as a top supplier for on-time delivery and customer responsiveness.
- Technical service – well versed in small cell spectrum, backhaul interface, wireless coverage and power requirements.
- Dedicated regional staff to assist in beta test evaluations, site surveys and logistics management.

# Superior Protection. Patented Technology. Guaranteed Performance.

Surge Protection Required	Recommended Surge Protection
AC, DC, Data & RF (coaxial entry), Ethernet POE, PTP radios, GPS	TSJ, DPR, ALPU Series, RMP 615, AL-LSXM
AC, DC Data & RF (coaxial entry), Ethernet POE, PTP radios, GPS, Microwave Link	TSJ, I2R-ICP (AC/DC), TB Series, CPX, IX Series, ALPU Series, TSX Series, GX Series
AC, DC Data & RF (coaxial entry), Ethernet PoE, PTP radios, GPS, Microwave Link	TSJ, I2R-ICP (AC/DC), TB Series, CPX, IX Series, ALPU Series, TSX- Series, GX Series
AC, Data & RF (coaxial entry), Ethernet PoE, PTP radios	AL-LSXM , ALPU Series, SL-120
AC, Data & RF (coaxial entry), Ethernet PoE, PTP radios	AL-LSXM, APLU Series, TB Series

## Data

## RF



TB Series



CPX



IX Series



ALPU



DPR



TSJ Series



AL-LSXM



TSX Series



GX Series

## 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:

- **Consulting and Site Audits:** More than 30 years of expertise and professional experience in power and grounding consulting, site audits and educational courses for mobile network operators responsible for small cell deployment.
- **Custom-Engineered Solutions:** Experts in transient technology and standards required for UL, CE and RoHS.
- **Tailored Product Expedite (TPE) Program:** Designed to provide application-specific surge protection solutions through modification or enhancement of a current product.
- **Technical Support:** Global engineering service teams 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 trained in the unique surge protection requirements found within femtocells, picocells and microcells.

