PolyPhaser TRANSTECTOR

Signal and Surge Protection Solutions

Surge Protection Capabilities

PolyPhaser | Transtector offers advanced RF, AC, DC and high-speed data and signal protection engineered to meet key global standards including IEC, IEEE, UL and CE. Our products have proven themselves in numerous critical markets and applications such as telecommunications, first responders, military, rail, medical, and energy.

To support worldwide applications and project requirements, PolyPhaser | Transtector provides an extensive partner base with highly qualified technical sales and engineering teams. Regardless of your application, PolyPhaser | Transtector has the proven ability and experience to design, develop and manufacture customized solutions to meet your specific needs. From concept to final product, we value close partnerships with our customers to ensure that we meet and exceed performance, quality, time and budgetary expectations. Global access to specialized engineering teams, test labs and ISO manufacturing facilities further enables us to meet your unique international requirements.

PolyPhaser leads the market with its patented RF protection solutions, specifically supporting communications systems. Based on its extensive experience with multi-stage surge protection, PolyPhaser continuously expands its product offering to support the needs of advanced network applications with technologies such as DC Block, DC Pass and Ultra Low PIM.

Transtector Systems specializes in the protection of highly sensitive, low voltage equipment through its patented, non-degrading silicon diode technology and custom filters. Its power quality expertise translates into a diverse product offering including AC, DC, and signal applications as well as integrated cabinets, power distribution panels and EMP hardened devices.

Protect Your Investment

Surge Protection Solutions

Power and Signal reliability play a role in every critical electrical and communication asset. If the application is key to revenue and growth, it must be protected from malfunctioning and downtime.

PolyPhaser | Transtector are established market leaders providing proprietary RF and high-reliability AC, DC and signal surge protection. Technical innovation and a solution driven mindset have guided our comprehensive portfolio of surge protection products.

Coaxial RF Surge Protection

	PRODUCT	FEATURES AND BENEFITS	OPTIONS/STANDARDS
	**TSX Series** Ultra low PIM RF coaxial protection	• Ultra low PIM RF coaxial protection in DC short and DC pass • High surge current capability, low let-through voltage • Frequency range: 698 MHz to 2.7 GHz	• Both male or female connectors • IEC 61000-4-5
	**IS-B50 Series** DC block protector for two way radio and SCADA applications	• DC block gas tube design • DC short filter design, no DC continuity between center pins • Optimized for low insertion loss, low let-through, high return loss • Frequency range between 1.5MHz-1GHz	• Both male or female connectors • Standards: IEC 61000-4-5, RoHS compliant, CE compliant
	**GXZ Series** DC pass for tower top amplifiers, GPS antennas, active antennas and base station entry panels	• Hybrid, multistage protection • Separate RF (DC-Block) and DC paths through the protector • Optimized for low insertion loss, low let-through, high return loss • DC Pass surge protector is available in 4 RF bands in the frequency range of DC to 2500 MHz	• Both male or female surge side connectors • Standards: IEC 61000-4-5, IEC 60529 IP67, Bellcore # TA-NWT-00487, CE 60950, RoHS compliant
	**Rail Filters (RRF)** Weatherized band pass filter protection for railway applications	• Superior inband RF performance • Integrated surge protection • Bidirection operations • Insertion loss and return loss at optimum levels to allow signal strength to remain high	• 160, 220, and 450 MHz rail configurations available for wayside and locomotive applications • Standards: RoHS compliant, IEC 60529 IP67, Bellcore #TA-NWT-000487
	**GT Series** Gas tube lightning protection with superior RF performance	• DC pass gas tube protection • High surge current capability, low let-through voltage • Frequency range between 3-7 GHz	• 30 volt configurations available in Bias-T, DC Pass or Twisted Pair • Both male or female connectors • Standards: RoHS compliant, CE 60950
	**VHF Series** High powered public safety, TETRA and UHF, VHR radio application protection	• High surge current capability, low let-through voltage • DC short filter design, no DC continuity between center pins • VHR, TETRA and UHF, VHF radio application frequency range	• Both male or female connectors • PIM performance available in select units • Standards: IEC 61000-4-5, RoHS compliant, CE compliant
	**SX Series** Radio frequency DC blocked filter protector	• High surge current capability, low let-through voltage • DC short filter design, no DC continuity between center pins • Elongated female connector allows for mounting through a 1/4" bulkhead or grounding bar • Frequency between 300 MHz to 10 GHz	• Both male or female connectors • PIM performance available in select units • Standards: IEC 61000-4-5, CE compliant

Data Line Surge Protection

	PRODUCT	FEATURES AND BENEFITS	OPTIONS/STANDARDS
	**ALPU POE** Compact RJ-45 surge protector for point-to-point and point-to-multi-point	• SASD technology • Easy installation/RJ-45 connectors • Compact design and 1/4-20 ground stud • Plastic and aluminum indoor/outdoor enclosures	• Various high speed protocol supported • Standards: GR 1089, NEC 800.100 and 830c100, IEEE 802.3af, CE, RoHS compliant, Hazardous location certified
	**ALPU Fit & Lite** Reliable surge protection for small cell networks, 3G, 4G applications	• Gas tube as well as hybrid SASD technology • Ease of installation (corrosion, UV, and salt fog protection - [ALPU Fit]) • Rugged environmental design	• GbE, PoE + and GbE, PoE ++ protocols • Pole/wall mount • Standards: UL 497B, IEC60950, CE and RoHS compliant, IP 65 (Fit), IP 23 (Lite)
	**Thunderbolt Series** Protection for power over GbE lines	• High power gas discharge tube (GDT) and TVSS protection in single protector • In-line installation • Optimized for signal throughput • Bulkhead mount	• 10/100 I PoE, GbE and GbE I PoE configurations available • Standards: IP67, CE, RoHS
	**DPR Series** Surge protection for GbE, PoE, Ethernet rack, wall or DIN rail mount	• Line and load bidirectional protection • Unprotected pins bonded to ground • Individual modules in plastic housing with DIN rail snap on feature for mounting and grounding	• Data and PoE Vdc configurations available • 1RU chassis holds up to 16 modules and is adjustable to fit 19" or 23" racks • Standards: GR-1089, NEC 800.100 and 830.100, IEEE 802.3af, ITU703
	**CPX** Protection for power over GbE lines	• Line and load bidirectional protection • Ease of installation for individual protection modules • Wall or DIN rail mount	• T1E1, 10/100 Ethernet, 10/1000 GbE Ethernet, 10/ 100 PoE, and 48 Vdc power configurations • 4 port or 16 port chassis • Standards: GR-1089 CORE, UL 497A, UL497B, IEEE802.3 ITU703, Hazardous location certified models
	**TSJ Series** Compact data line surge protection for T1, gigabit PoE, GbE, PoE, and Ethernet	• High surge current silicon avalanche and gas tube surge capacity • Easy installation with ground stud and RJ-45 jacks	• 5, 48 Vdc configurations • Standards: UL 497B Listed, RoHS compliant
	**MDPS Series** Provides reliable surge protection in an outdoor NEMA 4X rated enclosure applications	• DPR modules offer GbE PoE surge protection • Ease of installation for DIN Rail modules • Wall | Pole mount capabilities • Modular enclosure support, up to eight (8) DPR modules (two DPR modules provided with unit)	• Standards: NEC 800.100, 830.100, NEMA 4X enclosure

AC Surge Protection

	PRODUCT	FEATURES AND BENEFITS	OPTIONS/STANDARDS
	**AC Edge Series** Rack mounted 120 Vac and 240 Vac distribution panel with dual inputs and surge protection	• Allows customers standardization of AC power installation and start up • Wire from commercial power or UPS breakers • Integrated surge protection (5 kA SASD per input) • Remote alarm circuits: power and breaker	• Space saving 2 RU • Circuit breaker options: 1, 2, 3, 4, 5, 10, 15 Amp • Standards: UL 60950 listed
	**SP Series** Protection for Type 1 and Type 2 applications	• MOV technology • LED Status indication • Quick installation for indoor/outdoor use • Compact design and rugged construction	• 120 Vac to 600 Vac configurations • Indoor | outdoor options • Standards: UL 1449 4th Edition, UL 964, ANSI\IEEE, Type 1 US and Type 2 Canada listed, NEMA 4X, RoHS, NEC 100/285
	**IMAX Series** Mission critical AC panel mounted surge protection	• Hybrid silicon diode/thermally protected MOV design • Line and load bidirectional protection • Field-serviceable replaceable suppression modules • Visual and remote status monitoring • Motorola R-56 approved	• 120/240 split phase silicon/MOV, 120/208 3-phase wye silicon MOV, 120/240 split phase MOV, 120/208 3 phase wye MOV configurations • Standards: UL 1449 4th Edition, ANSI/EEE C62.45, IEEE C62.412002 C High
	**PV Series** Modular robust surge protection for critical equipment	• Thermally protected MOV technology • Audible alarm and disable switch • Visual and remote status indication (dry relay contacts) per phase • EMI/RFI noise filtering	• Available with or without disconnect • All mode protection-L-N, L-G, N-G and L-L • Standards: UL 1449 4th Edition, NEC, IEEE
	**12R IEP 120-10** Replaceable DIN rail mounted surge protection	• SASD technology • Line and load bidirectional protection • Field-serviceable replaceable suppression module • Visual and remote status indication	• 120 Vac configuration available • Standards: UL 1449 4th Edition, IEEE C62 41, RoHS compliant, Hazardous location certified
	**I2R Storm Series** Ultra-compact silicon surge protection for Control Panel application	• SASD technology • Line and load bidirectional protection • Visual status monitoring • Remote status circuit • DIN rail mount	• 120/240 Vac configurations • Standards: UL 1449 4th Edition, IEC 61643-11, RoHS compliant
	**I2R SA Series** DIN rail surge protection for high exposed and sensitive electronic power systems	• Rugged MOV technology • Electrically isolated Form-C dry contacts with a three pin removable terminal plug • Visual status indicator • DIN rail mounted	• 120, 120-50, 230, 277 and 480 Vac configuration available • Single or 3-phase delta option • Standards: RoHS compliant, IEC 61643-1 Class II, Hazardous location certified

DC Surge Protection

	PRODUCT	FEATURES AND BENEFITS	OPTIONS/STANDARDS
	**DC Edge Series** Power distribution for scalable and reconfigurable edge network applications.	• High current capability • Universal voltage • Front panel alarm status LED and discrete dry relay contacts • Front load TFD housing or circuit breaker • Compact 1 RU PDU	• 19" or 23" rack mount • Standards: UL 60950, NEBS and RoHS compliant
	**DRDC Series** Superior surge protection for low frequency data lines	• SASD technology • DIN rail mount with replaceable suppression module, no rewiring required • Screw terminals accept 28-12AWG	• 7, 12, 24, 48, 70 Vdc configurations available • Standards: IEEE C 62.41, FM approval Class 1 Division II, CE, ATEX EU Directive 94/9/EC, UL 497B (except DRDC-70)
	**DC Defender** 48 Vdc silicon surge protection for indoor/ outdoor tower top antennae applications	• Series fused, SASD surge protection • NEMA 3R enclosure • 3 mode DC power protection • 10 AWG wire for 15 amp circuits	• Panel and pole mount configurations • Standards: CE 60950, NEMA 3R, RoHS compliant
	**I2R ICP Series** Silicon surge protection for DIN rail mount applications	• SASD technology • Parallel installation • Replaceable suppression module, no rewiring required • Visual and remote (dry contact relay) status indication	• 12, 24, 48 Vdc configurations • Standards: IEEE C62 41, UL 49AB
	**DRI Series** Two pair | four wire protection approved for hazardous locations	• SASD technology • Line and load bidirectional protection • Plug-in, suppressor modules, DIN rail mount • Visual and remote (dry contact relay) status indication	• 24,120 Vdc configurations available • FM approval Class 1 Division II, ATEX EU Directive 94/9/EC
	**I2R IEP DC Series** Silicon surge protection for DIN rail mount applications	• SASD technology • Replaceable suppression module • Visual and remote (dry contact relay) status indication	• 12, 24, 48 Vdc configurations available • Standards: IEC 61643-1 RoHS compliant
	**DCOD Series** Silicon surge protection for indoor/ outdoor tower top antennae applications	• SASD technology • Series 25 Amp two port protection • Surge and protected wiring terminals • Remote status monitor relay contacts	• 24, 48 Vdc configurations • 2.5kA and 5kA 8/20us surge withstand configurations available • Standards: IEC 61643-11 compliant, CE 6095, NEMA 3R

Telecommunication Solutions

Tower Top Electronics
(Data/PoE Protection, RF Lightning Protection, DC Protection)

Cell Site

Unikit

RF Surge Protection

Power Distribution Panels

Trapeze

BSC

MSC

RMP

AC Panel Protection

Power Distribution Cabinet

Rack Unit Protection

TSJ

Ground Ring

DATA LINE PROTECTION

TSJ

ALPU PoE

ALPU-FIT

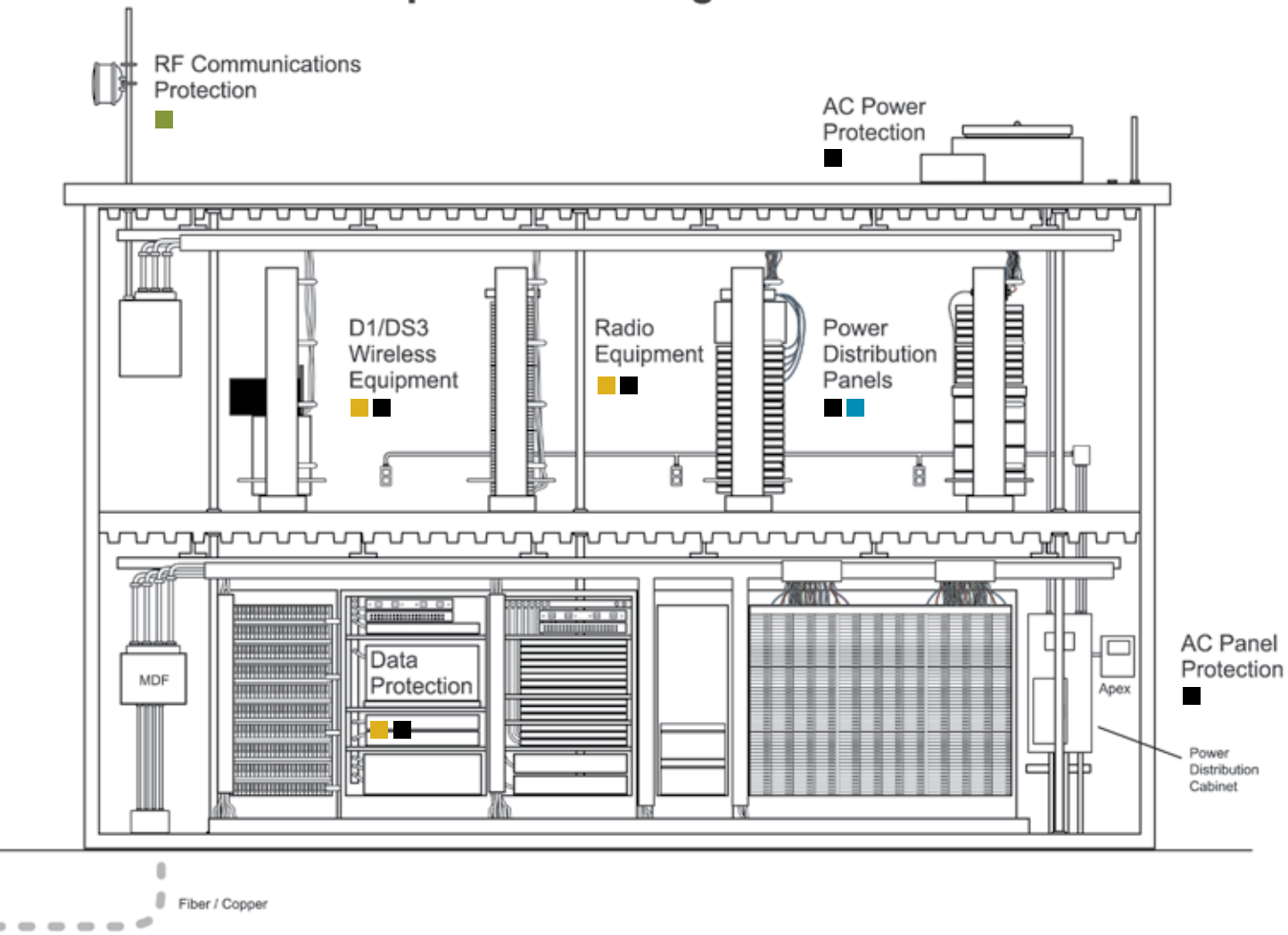
RF PROTECTION

TSXDC

DGXZ

GT

Mobile Telephone Switching Office



AC PROTECTION

12R Storm

AC Edge

IMAX Series

DC PROTECTION

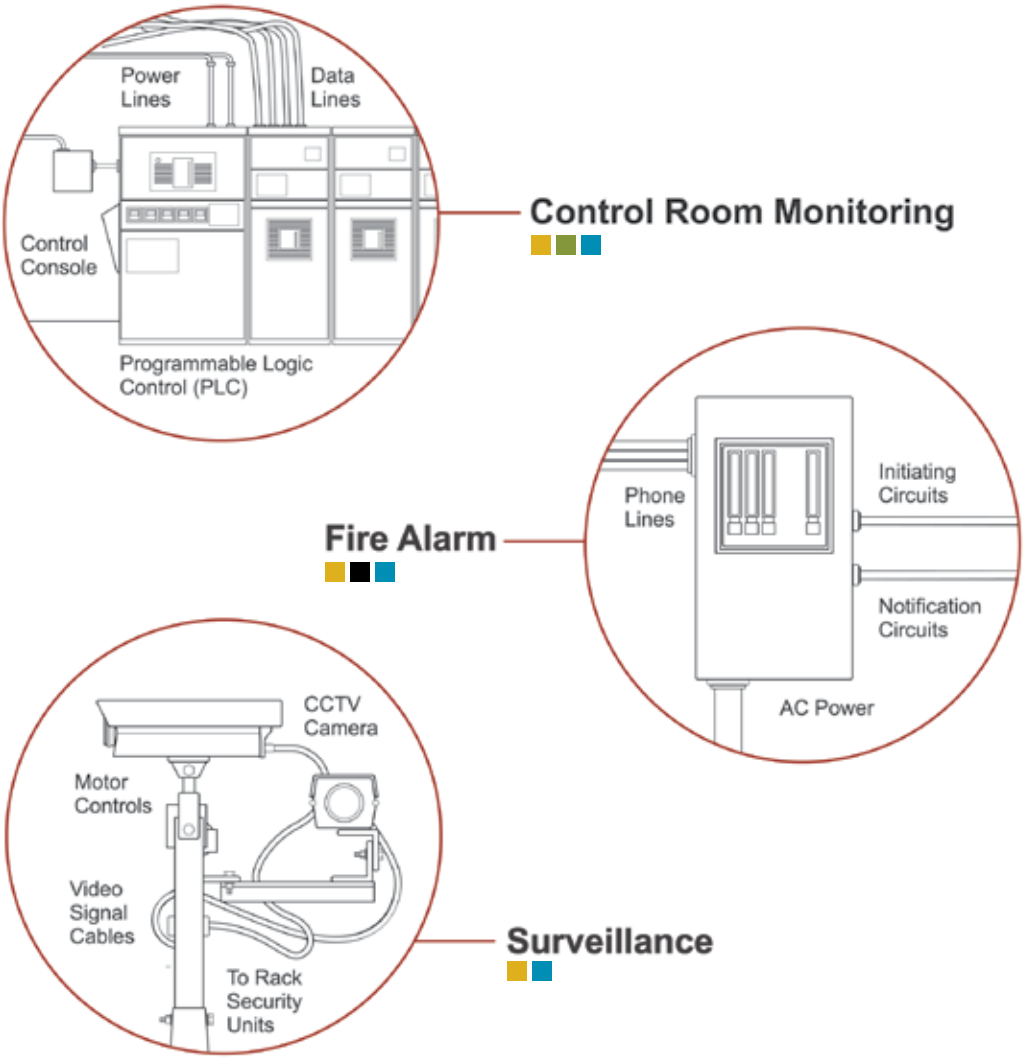
DC Edge

DRDC

DC Defender

DCOD

Security Solutions



DATA LINE PROTECTION

ALPU PoE

ALPU-FIT

CPX

RF PROTECTION

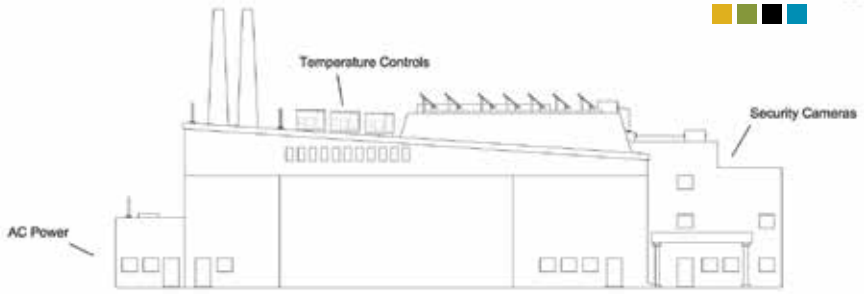
IS-B50LN-C2

AL-LSX

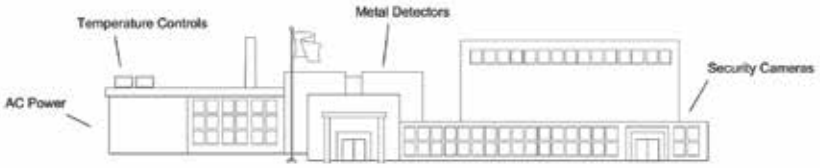
TSX

Security/Alarm Systems

Banking Facilities

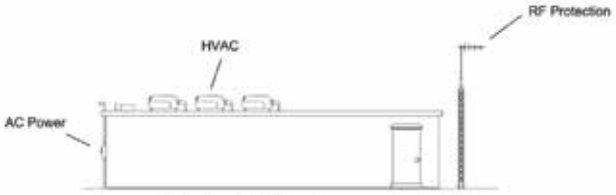


Commercial Sites



School Safety/Security Systems

Government Institutions



Data Center/Data Farms

Data/Distribution Sites

AC PROTECTION

APEX IV Series

AC Edge

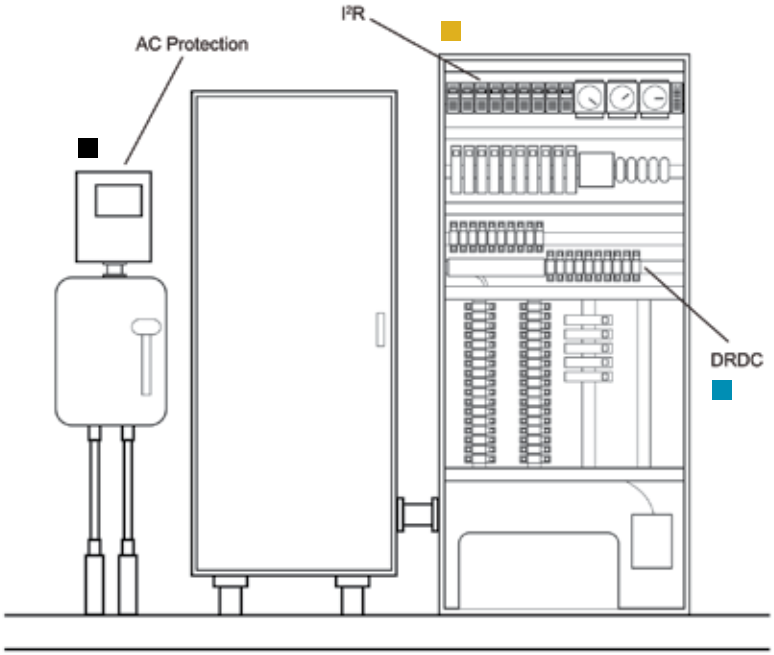
DC PROTECTION

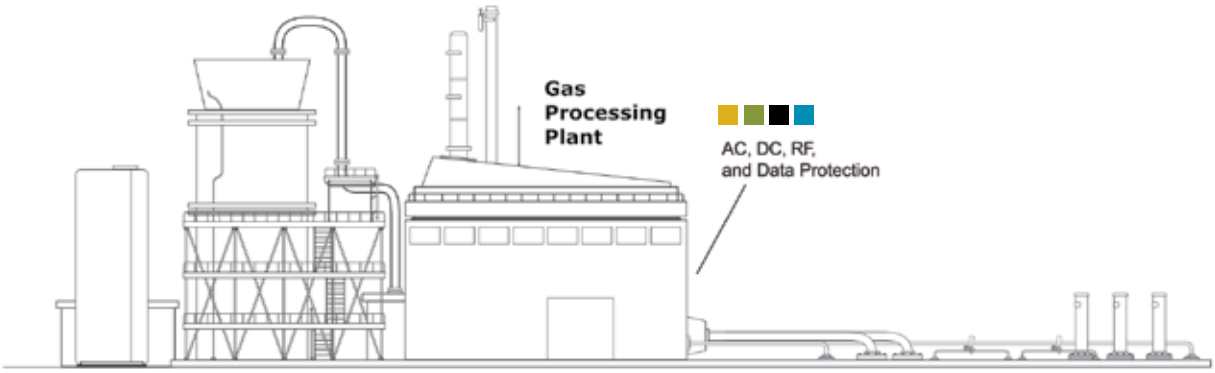
DRDC

I2R IEP

DRI

Oil & Gas Solutions





DATA LINE PROTECTION

ALPU PoE

TSJ PoE 56

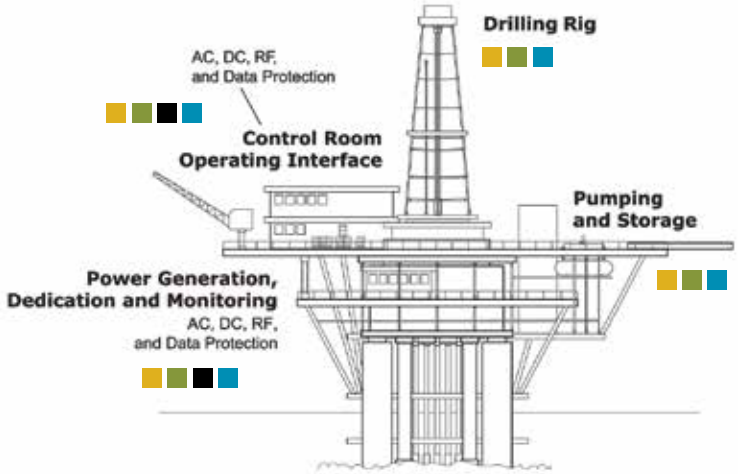
RF PROTECTION

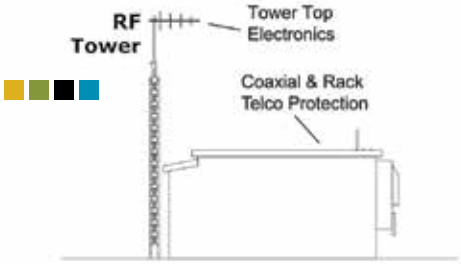
DGXZ

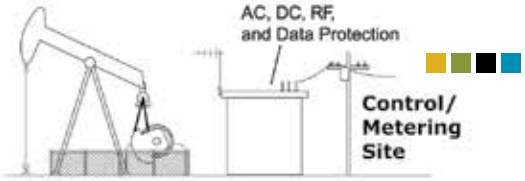
AL-LSX

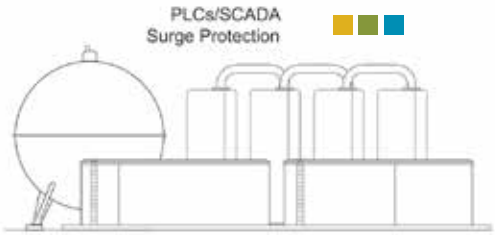
IS-B50LN

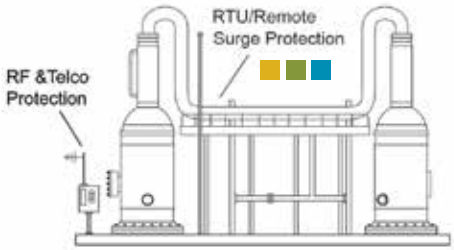
TSX











AC PROTECTION

12R Storm

12R SA Series

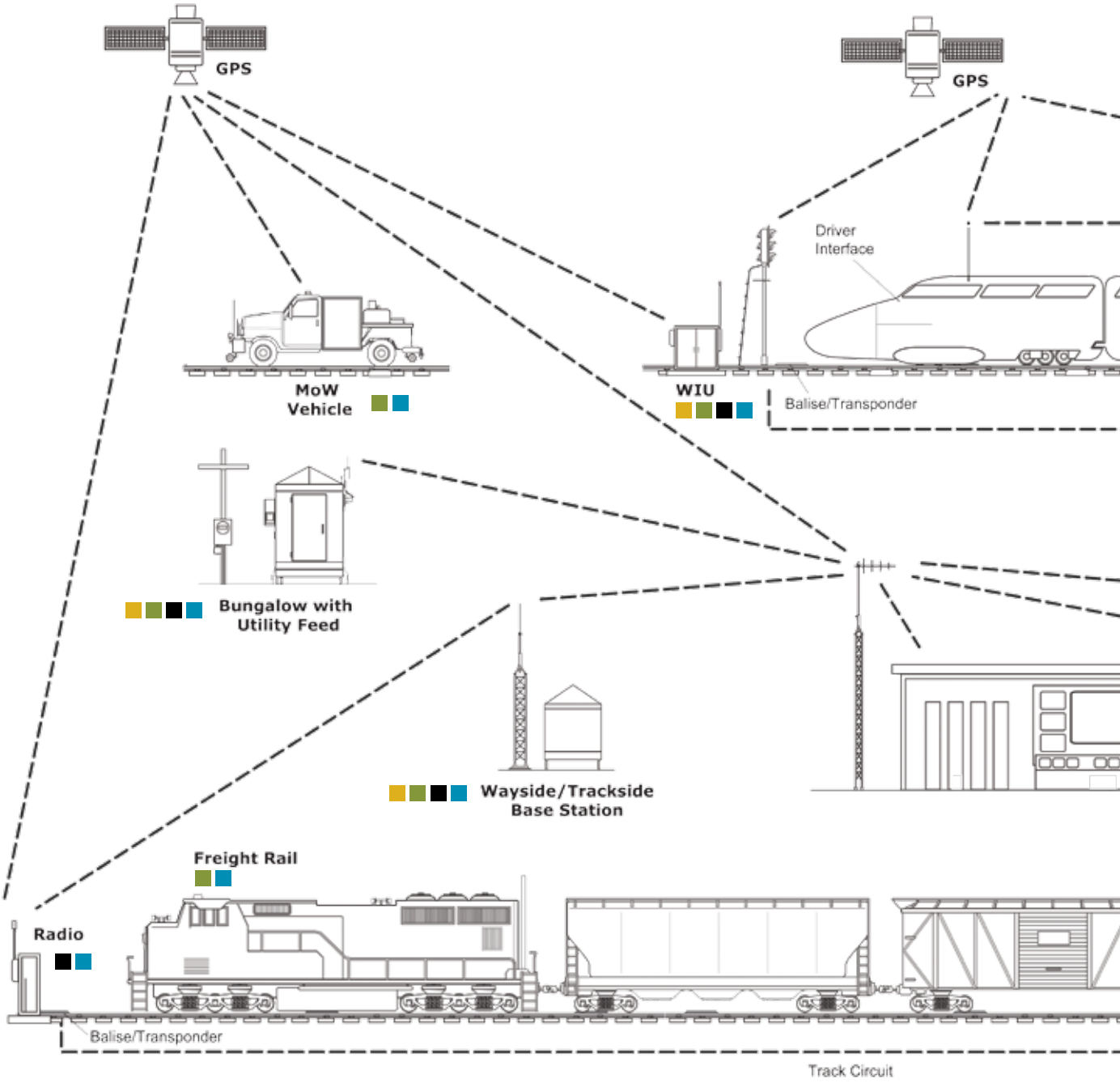
DC PROTECTION

DRDC

DRI Series

12R ICP

Rail Transportation Solutions



DATA LINE PROTECTION

ALPU PoE

TSJ PoE 56

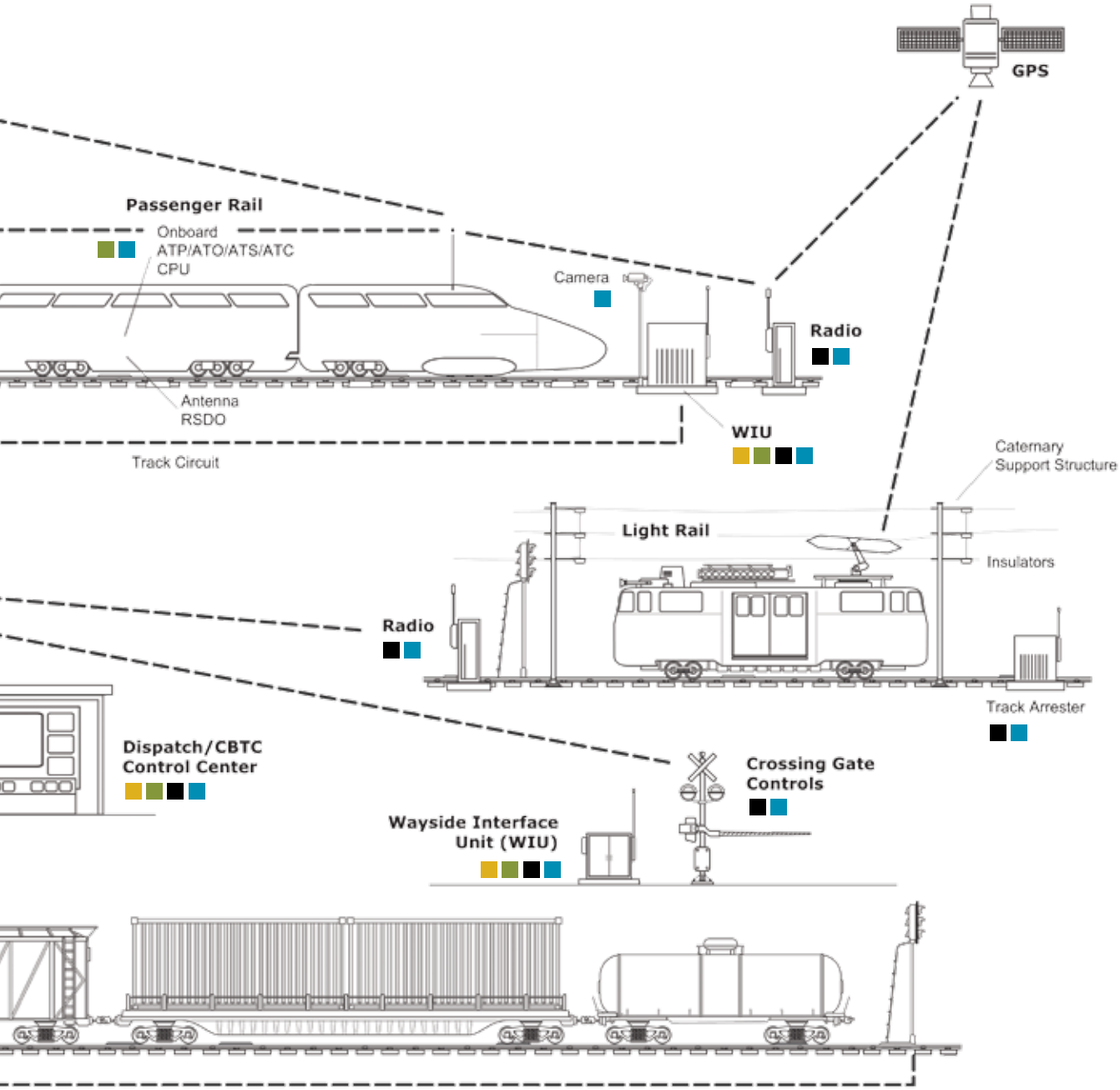
RF PROTECTION

DGXZ

VHF50HN

RRF Filter Series

TSX



AC PROTECTION

12R Storm

12R SA Series

DC PROTECTION

DRDC

DRI24

I2R IEP

PolyPhaser TRANSTECTOR

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