Signal and Surge Protection Solutions

PolyPhaser TRANSTECTOR

smiths power

Global 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.

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, DOWIN, 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 around 23,000 people in more than 50 countries.

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.

Data Line Surge Protection

	PRODUCT	FEATURES AND BENEFITS	OPTIONS/STANDARDS
	**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 available • Standards: UL 497B Listed, RoHS compliant
	**TSJ X6 Series** Data line protector for T1/E1 and Ethernet applications	• Replaceable modules available • Line and load bidirectional protection • Easy installation with external RJ-45 plug-ins with single 1/4-20 grounding stud • High density, small footprint	• 3, 3.3, 5 Vpk configurations available • Silicon and transient blocking technology available • Standards: GR 1089 CORE
	**FSP Series** Silicon diode, two pair equipment surge protector	• SASD technology • Optimized for RS-422, RS-485 and 4-20 mA loop • Protects up to two low speed data, power or differential pair signal lines	• 12, 24, 52, 280 Vdc configurations available • Standards: GR 1089 CORE
	**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 • Wall or DIN rail mount • Standards: GR-1089, NEC 800.100 and 830.100, IEEE 802.3af, ITU703
	**CCTV Series** Protection for coaxial based network equipment	• SASD technology • Line and load bidirectional protection • BNC connectors for video and screw terminal pan tilt • Wall mount	• Protection modules optimized for the following applications: Triple circuit protector for coax, 24 V ac/dc and RS-232/RS-422/RS-485 or Triple circuit protector for coax, and two pairs RS-232/RS-422/RS-485 • Standards: IEEE/ANSI C62.41, UL 497B listed CCTV configured
	**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
	**IX Data Series** Digital data/DC line protector for RS232, RS422, RS485, T1/E1 and telco trunk line applications	• Hybrid cascade design technology • Multi-line surge protection • Outdoor metal enclosure	• 12, 48, 56 and 72 Vac configurations available • 12, 48, 56 and 72 and Ethernet V PoE configurations available • Standards: UL 4978

Coaxial RF Surge Protection

	PRODUCT	FEATURES AND BENEFITS	OPTIONS/STANDARDS
	**SX Series** Radio frequency DC blocked filter protector	• High surge current capability, low let-through voltage • DC shorted filter design, no DC continuity between center pins • Elongated female connector allows for mounting through a 1/4" bulkhead or grounding bar • Frequency range between 300 MHz to 10 GHz	• Both male or female surge/protected side connectors • PIM performance available in select units • Standards: IEC 61000-4-5, RoHS compliant, CE compliant
	**B50 Series** DC blocked protector for two way radio and SCADA applications	• DC blocked gas tube design • DC shorted 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 surge/protected side connectors • Standards: IEC 61000-4-5, RoHS compliant, CE compliant
	**IS-50 Series** DC block broadband HF, VHF and UHF coaxial protection	• DC blocked gas tube protection • High surge current capability, low let-through voltage and throughput energy • Frequency range of 1.5MHz-1GHz	• Mount to bracket or flat single point grounding panel • Flange and bulkhead mounting options • Standards: IEC 61000-4-5, RoHS compliant, CE compliant
	**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 protection options • Both male or female surge/protected side connectors • Standards: RoHS compliant, CE 60950
	**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 make or female surge/protected side connectors • IEC 61000-4-5
	**HF Series** High powered public safety, TETRA and UHF, VHR radio application protection	• High surge current capability, low let-through voltage • DC shorted filter design, no DC continuity between center pins • VHR, TETRA and UHF, VHF radio application frequency range	• Both male or female surge/protected side connectors • PIM performance available in select units • Standards: IEC 61000-4-5, 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 2500MHz	• Both male or female surge side connectors • Standards: IEC 61000-4-5, IEC 60529 IP67, Bellcore # TA-NWT-00487, CE 60950, RoHS compliant

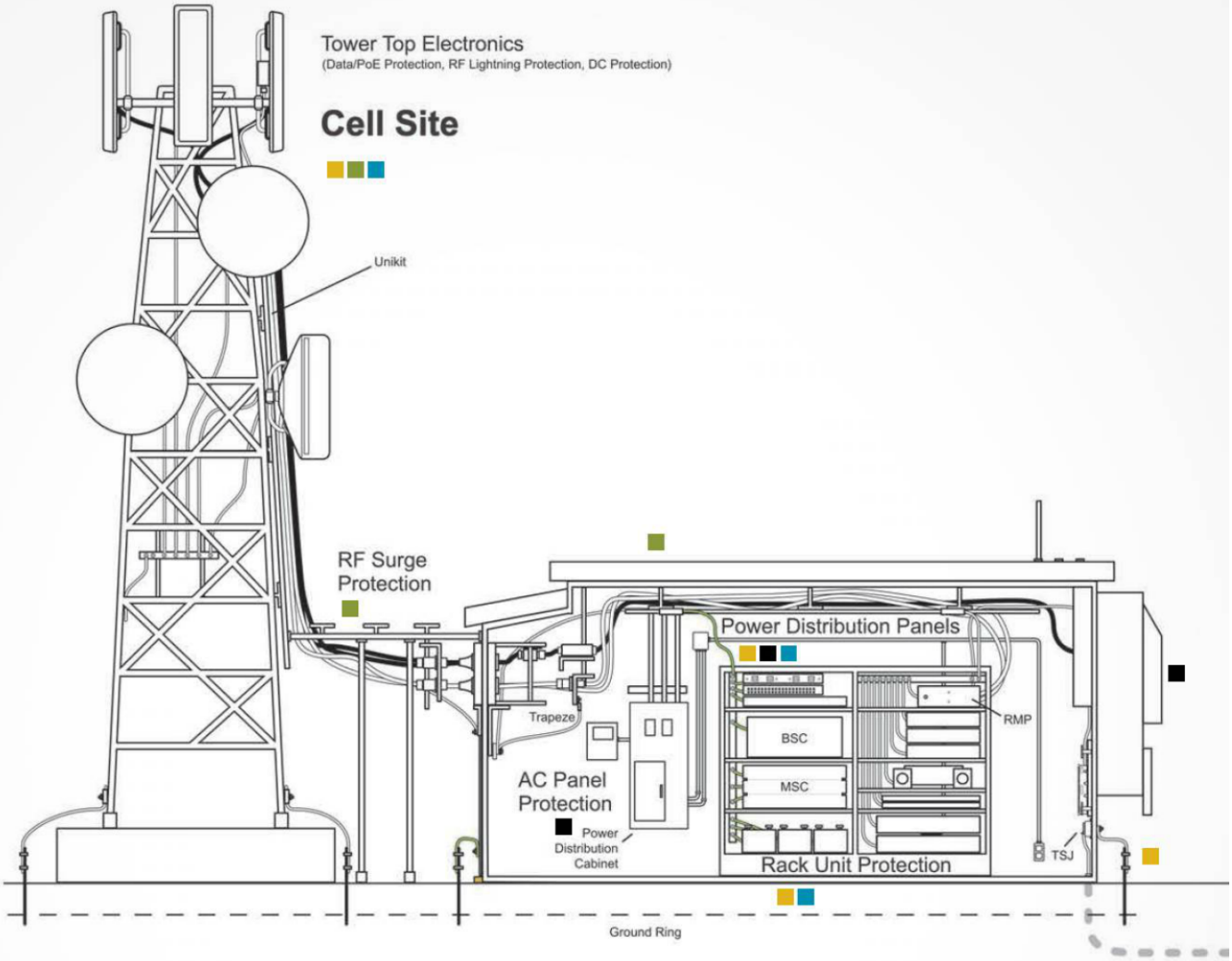
AC Surge Protection

	PRODUCT	FEATURES AND BENEFITS	OPTIONS/STANDARDS
	**SuperHy Series** Robust hybrid MOV surge protection for day to day surges	• Hybrid silicon diode/thermally protected MOV design • Parallel, bidirectional protection • Visual and remote status indication • DIN rail mounted	• 240/415 3-phase wye w/NPE or 240 Vac configurations available • Outdoor enclosure configurations available • Standards: IEEE Category C high, IEC Class I and Class II
	**IEC Series** Surge protection for C-19, and IEC C-20 plug-in applications	• SASD technology • Visual status monitoring • Single outlet • Panel mounting	• 240 Vac configurations available • Standards: IEEE Category A
	**I2R ICP Series** Silicon surge protection for DIN rail mount applications	• SASD technology • Parallel installation • Replaceable suppression modules, no rewiring required • Visual and remote (dry contact relay) status indication • DIN rail and panel mounting	• 120 and 240 Vac single phase configurations available • Standards: UL 1449 3rd Edition
	**APEX IV Series** Industrial grade AC panel mounted surge protection	• Silicon diode technology with robust, high surge current thermally protected MOV • Line and load bidirectional protection • Field-serviceable replaceable suppression modules • Visual and remote status indication	• 120 V Single wye, 120/240 V Split wye or 120/208 V Wye Three wye configurations available • Standards: UL 1449 3rd Edition on selected models, NEMA 4X enclosure
	**MCP Series** Protection for cabinet/ pedestal applications	• SASD technology with MOV backup • Line and load bidirectional protection • Visual and remote status indication • Hardwired, compact suppression module	• 120/240 Vac split phase, 120/208 Vac 3-phase wye, 240 Vac single phase configurations available • Standards: IEEE C62.41, IEC 61643-1,UL 1449 3rd Edition on selected models
	**OP8 Series** Eight outlet power distribution with integrated surge suppression	• SASD technology • Dedicated Motorola Type-3 surge protection • Visual status indication	• 120, 240 Vac configurations available • Rack or cabinet mounted options available • Standards: Motorola R56 approved, UL 60950 listed
	**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, 1250-50, 230, 277 and 480 Vac configuration available • single or 3-phase delta options available • Standards: RoHS compliant, IEC 61643-1 Class II, IEC EN60529

DC Surge Protection

	PRODUCT	FEATURES AND BENEFITS	OPTIONS/STANDARDS
	**3DC48-20** 48 Vdc multi-line surge protector	• High surge current capacity MOV technology • Low let-through voltage • All mode protection series device • Wall mount	• Protection modes options: Pos-Neg, Pos-GND or Neg-GND • Standards: 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)
	**I2R IEP DC Series** Silicon surge protection for DIN rail mount applications	• Silicon diode surge protection • Replaceable suppression module • Visual and remote (dry contact relay) status indication	• 12, 24, 48 Vdc configurations available • Standards: IEC 61643-1, RoHS compliant
	**I2R ICP Series** Silicon surge protection for DIN rail mount applications	• Silicon diode surge protection • Parallel installation • Replaceable suppression module, no rewiring required • Visual and remote (dry contact relay) status indication	• 12, 24, 48 Vdc configurations available • Standards: IEEE C62.41, UL 497B
	**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
	**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 • CE • ATEX EU Directive 94/9/EC
	**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 available • 2.5kA and 5kA 8/20us surge withstand configurations available • Standards: IEC 61643-11 compliant, CE 6095, NEMA 3R
	**IX DC Series** Configurable wire pair outdoor protection	• Hybrid technology • Series two port protection • Surge and protected wiring terminals	• 12, 24, 48 Vdc configurations available • 1, 2, 3 and 4 wire pair configurations available • Standards: UL497B, CE 60950

Telecommunication Solutions



DATA LINE PROTECTION

TSJ

ALPU PoE

TSJ-X6

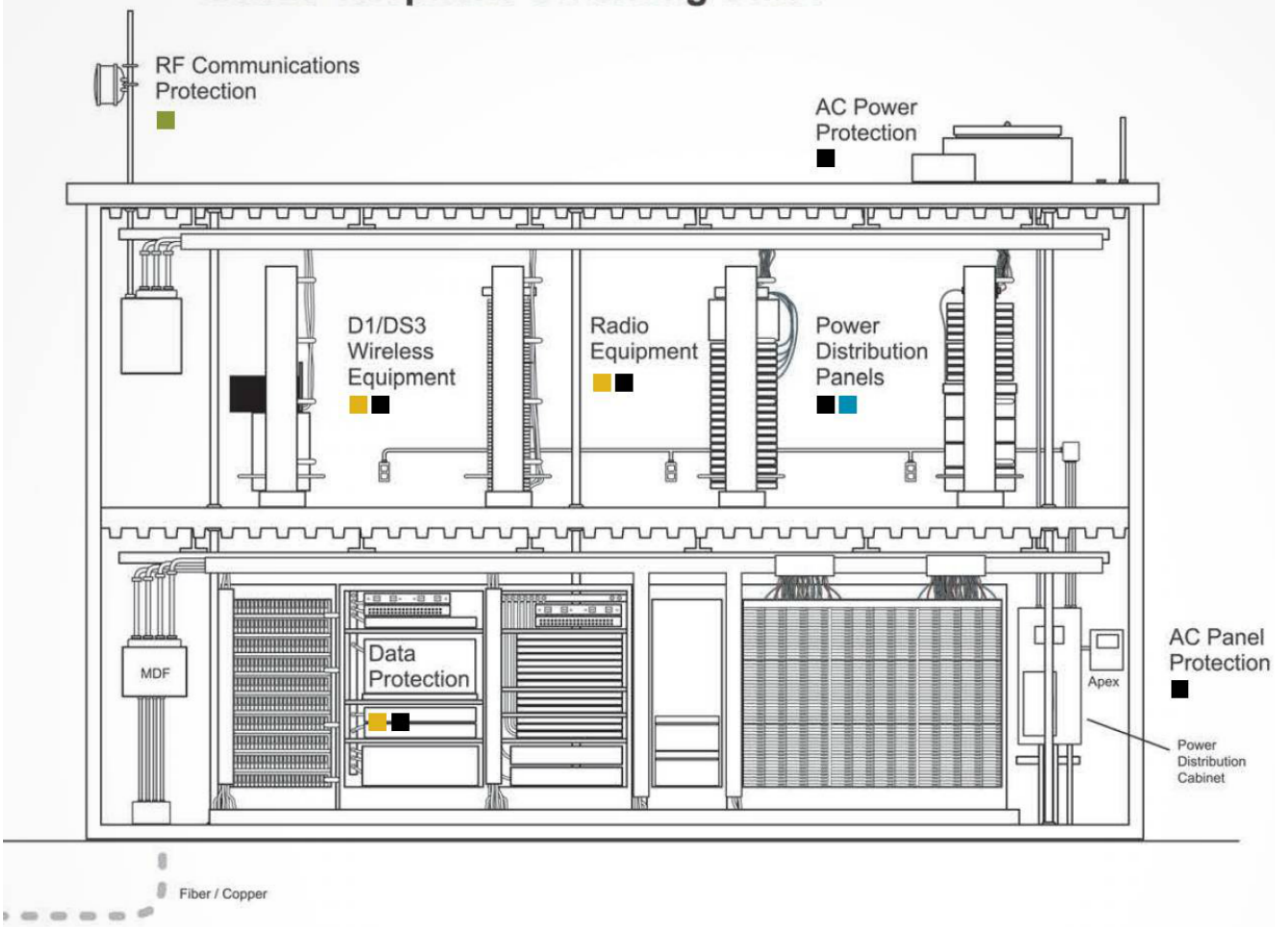
RF PROTECTION

TSXDC-DFM

DGXZ+06NFNF-A

GT-NFF

Mobile Telephone Switching Office



AC PROTECTION

SuperHy

OP8

MCP

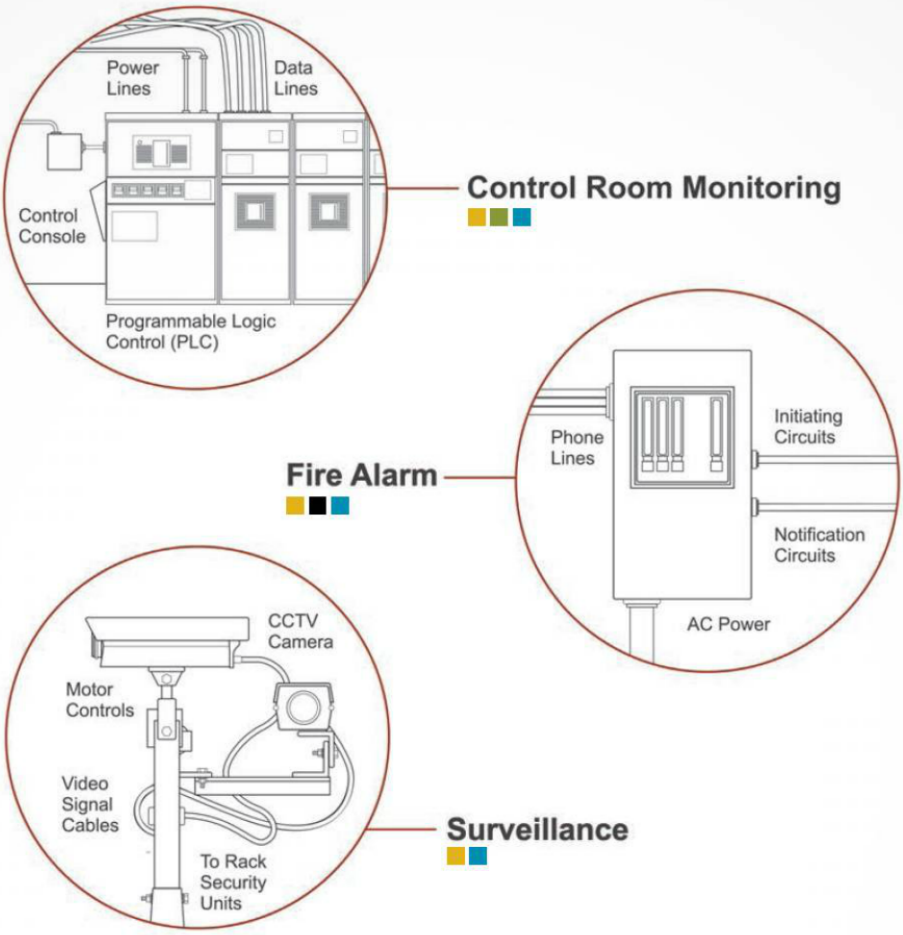
DC PROTECTION

3DC48-20

DC Defender

DCOD

Security Solutions



DATA LINE PROTECTION

ALPU PoE

FSP4002

CCTV-PTZ

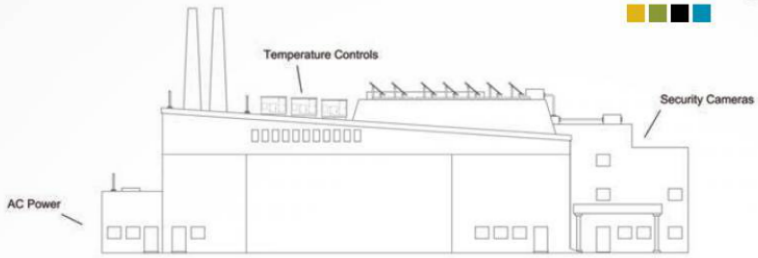
TSJ PoE 56

RF PROTECTION

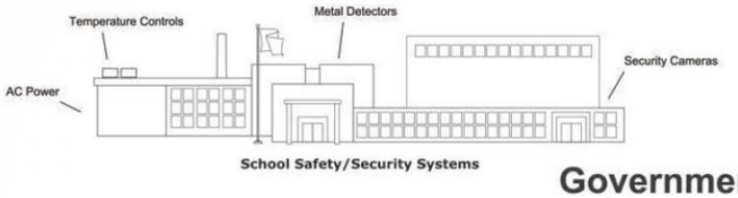
IS-B50LN-C2

AL-LSXM

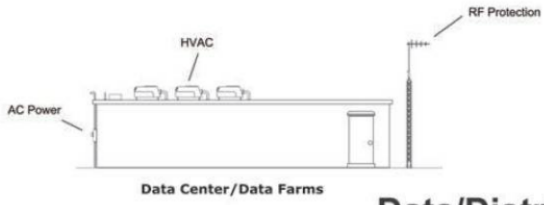
Banking Facilities



Commercial Sites



Government Institutions



Data/Distribution Sites

AC PROTECTION

TSX-NFF

MCP 240

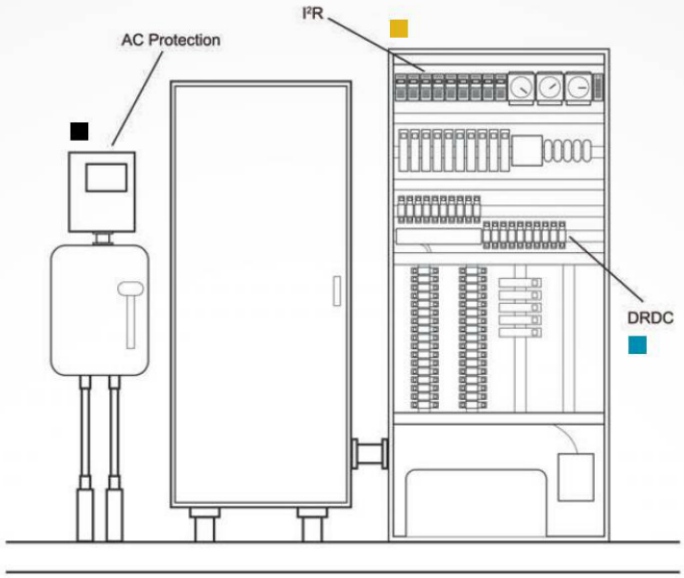
OP8

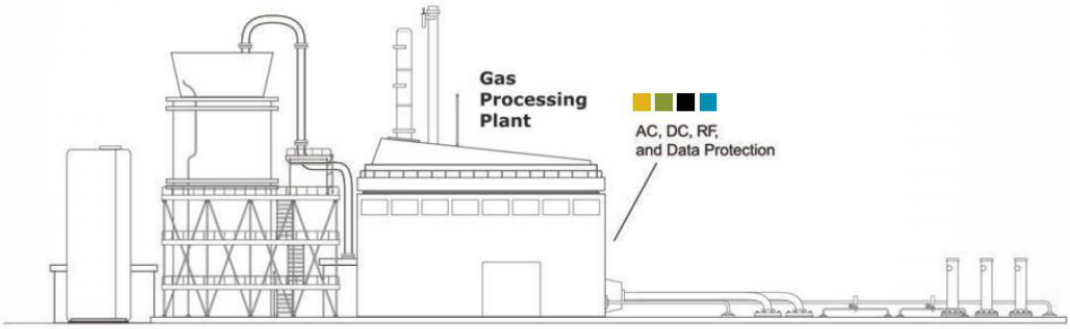
DC PROTECTION

DRDC

3DC48

Oil & Gas Solutions





DATA LINE PROTECTION

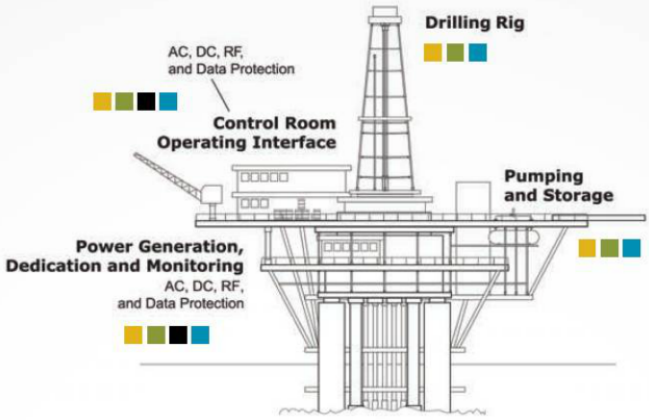
TSJ PoE 56

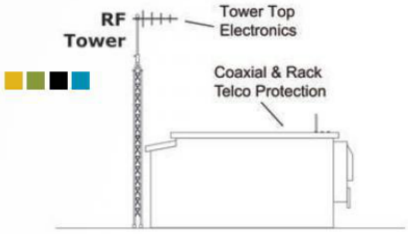
TSJ 10 100BT

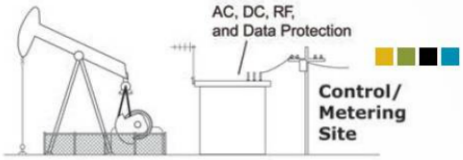
RF PROTECTION

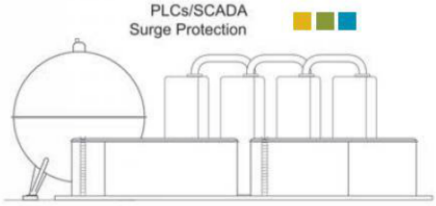
AL-LSXM-MA

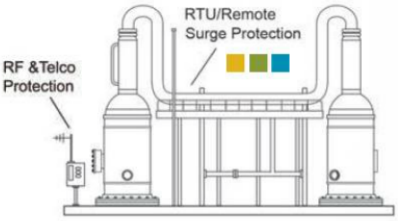
IS-B50LN-C2-I











AC PROTECTION

IEC Series

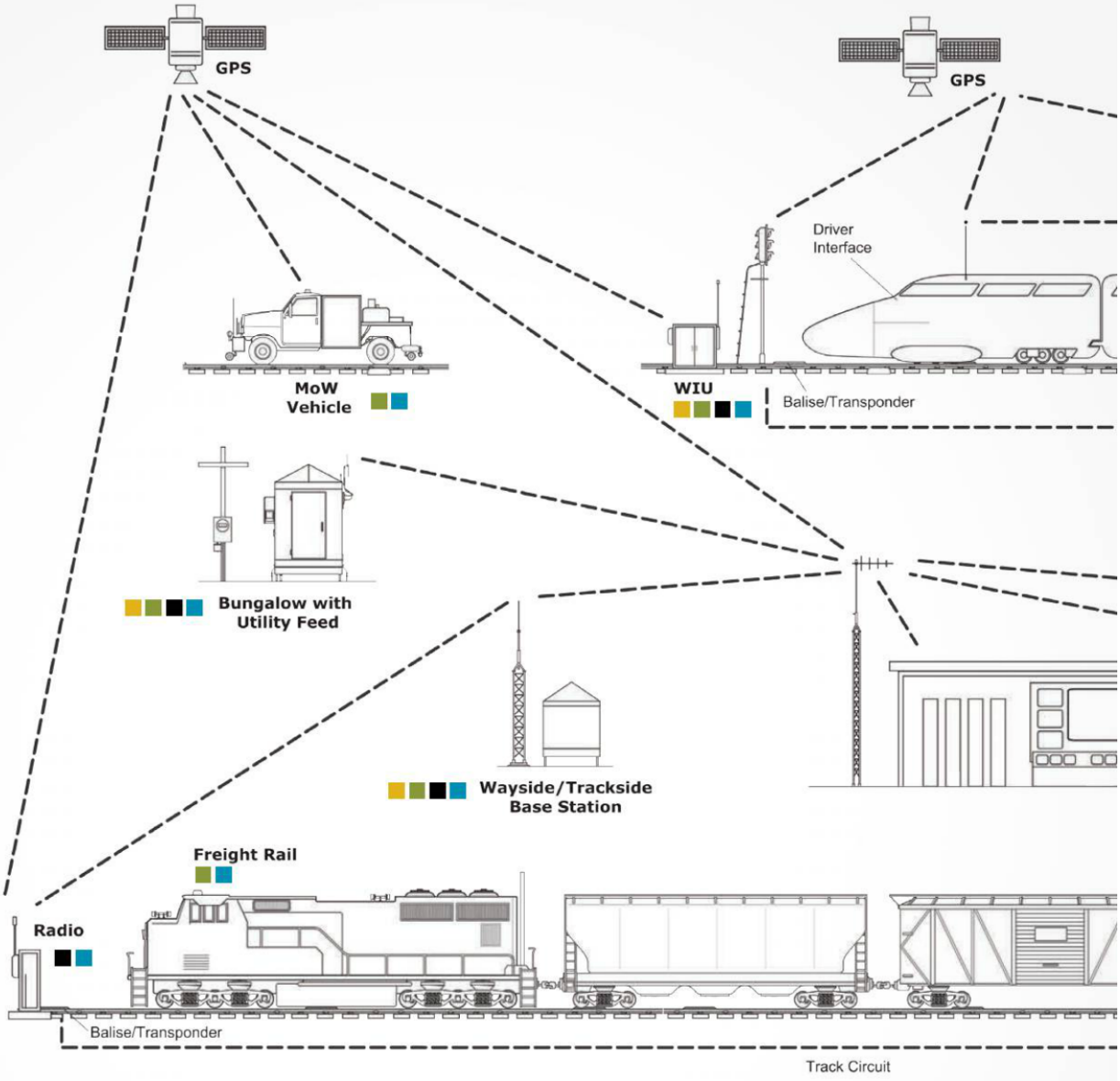
I2R ICP

DC PROTECTION

DRDC

DRI Series

Rail Transportation Solutions



DATA LINE PROTECTION

ALPU PoE

TSJ PoE 56

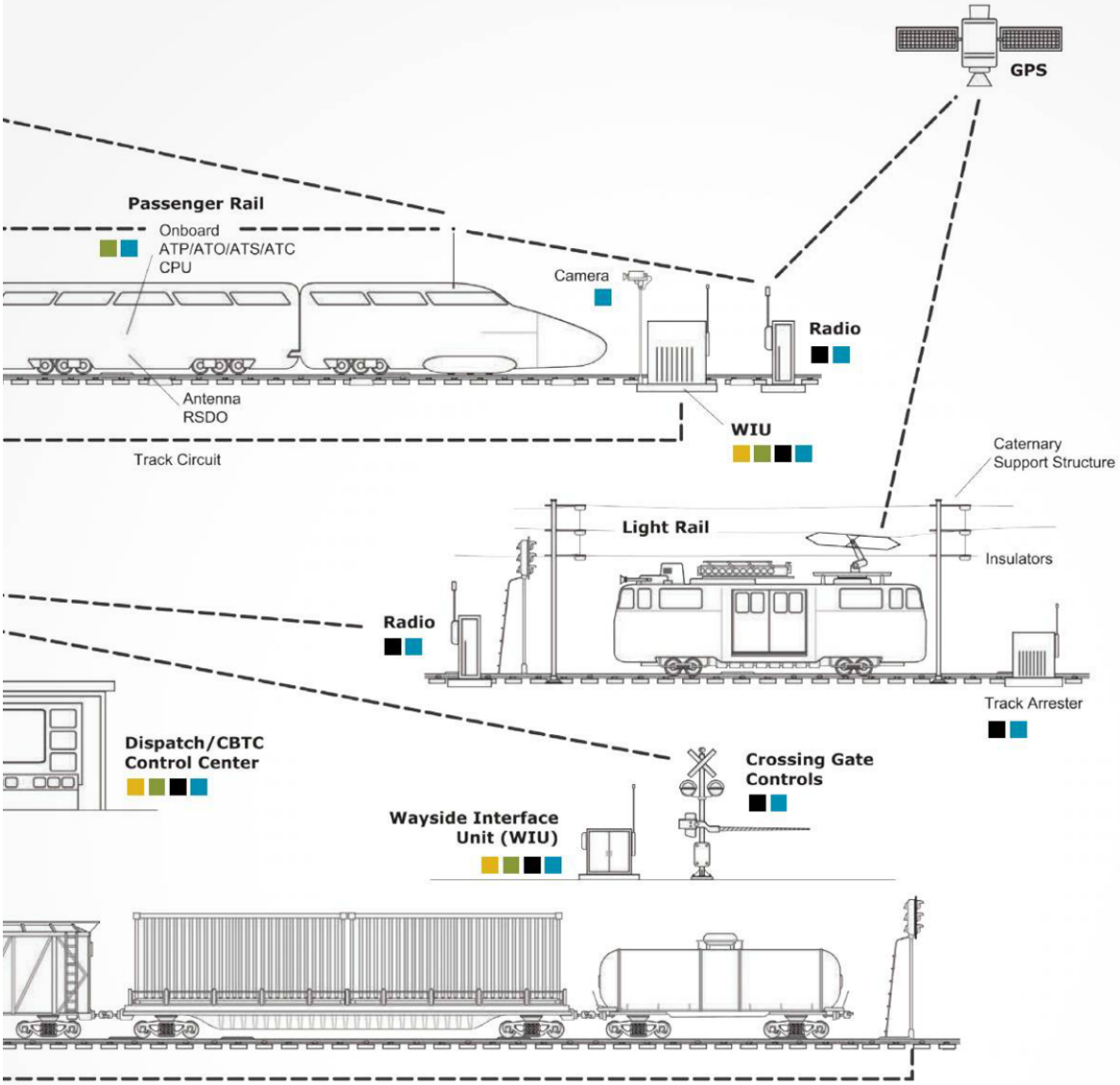
RF PROTECTION

DGXZ+06NFNF-A

VHF50HN

AL-LSXM-MA

TSX-DFF



AC PROTECTION

I2R SA 240-50

SuperHy

DC PROTECTION

DRDC

DRI24

I2R IEP

PolyPhaser TRANSTECTOR

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