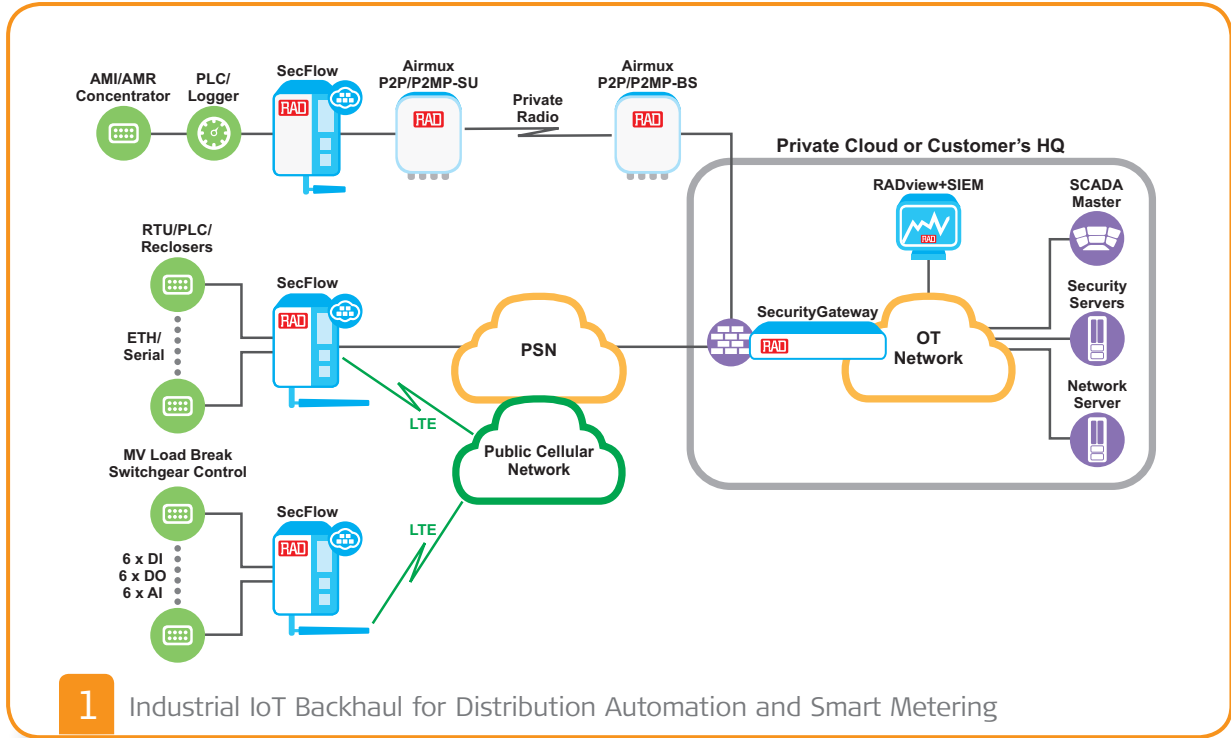




# Power Utility Communications



### Your Benefits:

- A comprehensive and secure solution addressing communications to secondary substations, metering and distribution automation
- Integrated IEC 61131-3 RTU/PLC
- Integrated LoRaWAN gateway
- Virtual environment for user-tailored applications allows customers to add new applications on top of SecFlow devices
- Zero-touch provisioning, enhanced cyber security (IPsec, PKI, FW, IDS/IPS, SIEM)
- Seamless communications over fiber optics, radio links, 2G/3G/LTE/5G cellular links, and leased lines from a telecom service provider
- Secure remote access for end-user device management
- Transparent delivery of SCADA, protocol conversion and terminal server
- Complies with IEC 61850-3 and IEEE 1613 environmental standards
- Point-to-multipoint radio connectivity supports high capacity mission-critical traffic over licensed and unlicensed sub-6 GHz bands



**SecFlow**  
Industrial IoT Gateway with Programmable Logic Controller



**SecurityGateway**  
VPN Aggregator, Router and Firewall



**Ceragon/Airmux**  
Wireless Transport Platform



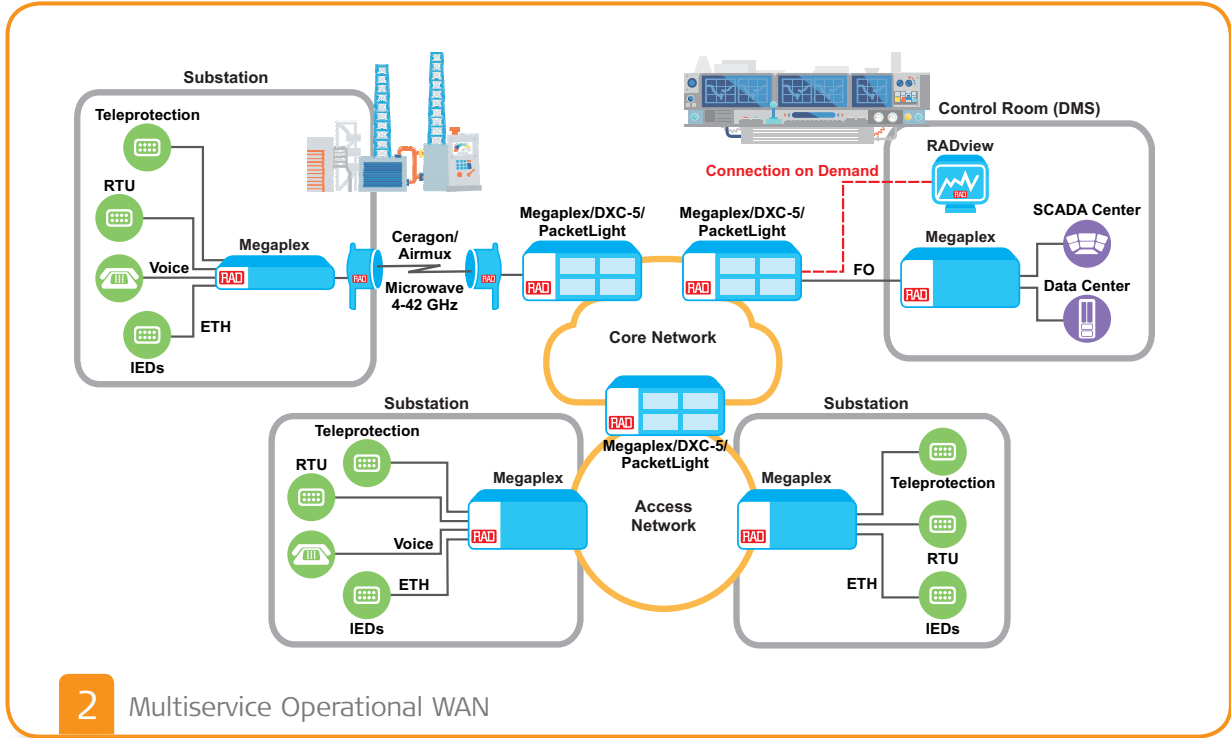
**RADview**  
Management and Domain Orchestration





# Power Utility Communications

Application Brochure



### Your Benefits:

- Powerful cross-generation TDM, MPLS and Ethernet capabilities, including TDM DSO cross connect and SDH/SONET, Carrier Ethernet with OAM and assured QoS, TDM pseudowire, Ethernet over NGPDH/SDH/SONET
- Complete cyber suite, including encryption, authentication and authorization
- Easy connectivity of all services including Teleprotection over either SDH/SONET or a packet network
- Supports analog and digital data and voice devices, as well as Ethernet IEDs, with versatile rates from DSO (time slot) up to STM-64/OC-192 or 10-GbE
- Guaranteed smooth migration to PSNs based on hybrid design for reduced latency and better resiliency
- Point-to-point and point-to-multipoint radio connectivity supports high capacity mission-critical traffic over licensed and unlicensed bands



**Megaplex**  
Next-Generation Multiservice Networking Node



**DXC-5**  
High Capacity Hybrid Cross Connect



**Ceragon/Airmux**  
Wireless Transport Platform



**PacketLight**  
Complete Solutions for WDM/OTN and Dark Fiber Applications

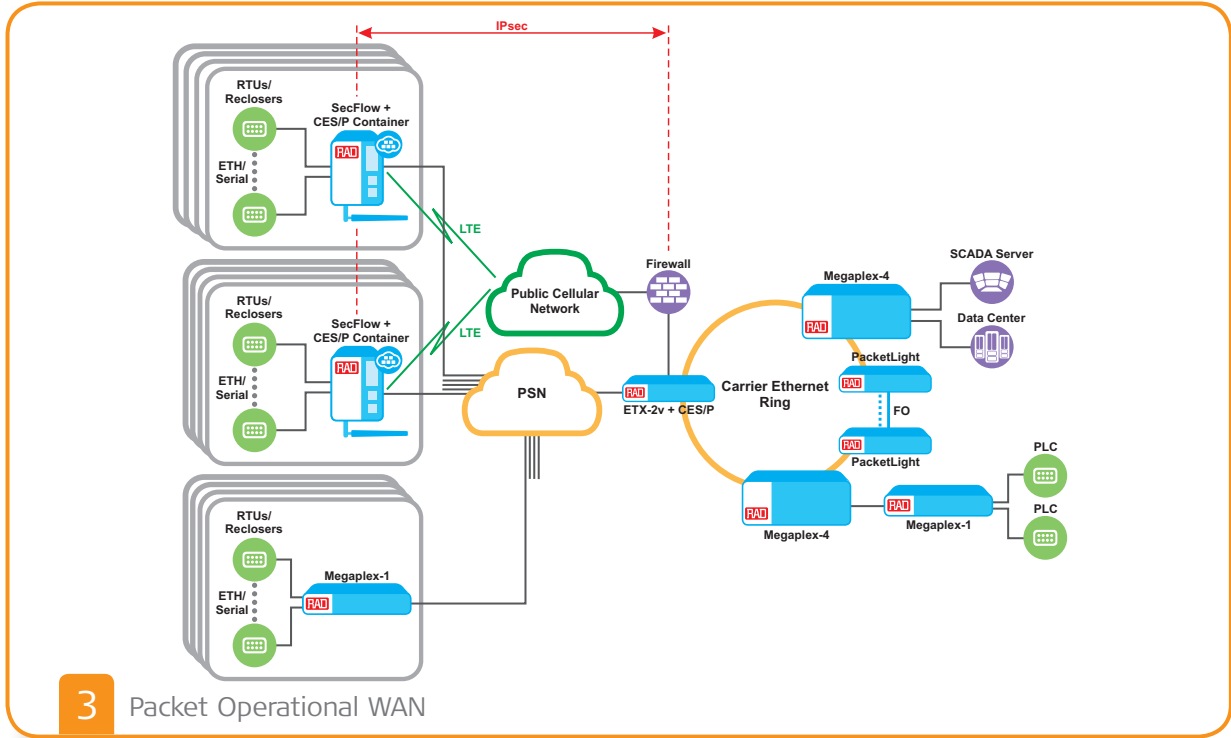


**RADview**  
Management and Domain Orchestration





# Power Utility Communications



### Your Benefits:

- Supports Ethernet-based communications for mission-critical automation traffic within the substation and between SCADA control centers
- Multiple elements on each ring/sub-ring
- Complies with IEC 61850-3 and IEEE 1613 environmental standards
- Legacy communications using pseudowire emulation (PWE) with hitless PWE redundancy
- Optional PoE+
- Ring protection: Standard with G.8032 and proprietary with fast recovery time (< 10 ms for PF\_Ring™)
- Supports installation in harsh environments, IEEE 1613 and/or IEC 61850-3 (optional for specific devices)
- Secure remote access for end-user device management
- Transparent delivery of Ethernet and serial SCADA protocols



**Megaplex-4**  
Next-Generation Multiservice Networking Node



**Megaplex-1**  
Multiservice Pseudowire Access Gateway



**DXC-5**  
High Capacity Hybrid Cross Connect



**PowerFlow**  
Managed Ruggedized Ethernet Switch with Power over Ethernet



**PacketLight-1000/2000**  
Complete Solutions for WDM/OTN and Dark Fiber Applications



**RADview**  
Management and Domain Orchestration

