

Layer-1 Encryption Solutions



Benefits

- ◆ Encryption on all data transmitted over the fiber (no omissions)
- ◆ Transparent, maintaining full bandwidth of the traffic
- ◆ Supports low latency applications
- ◆ Fiber tapping detection and alarm
- ◆ Interface with existing DWDM infrastructure and OTN networks
- ◆ No need to change or upgrade Layer-2/3 switch/routers



Industries



Government



Managed encrypted
wavelengths



Financial



Medical



ISP and Cloud



DCI



Utilities



Police



Solution features

- ◆ Muxponders, transponders, ADM
- ◆ Encryption per service or per uplink
- ◆ Supported services - GbE/10/40/100Gb Eth, STM-64/OC-192, 2/4/8/10/16/32G FC, OTU2/2e/3/4
- ◆ Low latency encryption
- ◆ Metro / short haul / long haul / DCI



Security needs answered!

- ◆ **Confidentiality** - preventing disclosure of information
- ◆ **Data Integrity** - ensuring that messages have not been altered
- ◆ **Authentication** - ensuring parties are identified



Products for this solution



PL-2000T
800G platform



PL-2000AD, PL-2000ADS
200G multi-rate ADM
muxponder/transponder



PL-2000M
200G multi-protocol
coherent muxponder



PL-1000TE
Multi-rate 1G-40G
transponder



Solution Highlights

Tapping Detection

- ◆ Tampering evidence
- ◆ Tapping alarm

Vendor Agnostic

- ◆ Any router/switch
- ◆ Compatible with existing DWDM Infrastructure and OTN networks

Transparent Data Flow

- ◆ Low latency
- ◆ Full throughput

Secured Management

- ◆ HTTPS, SNMPv3, SFTP, SSH, Firewall

Supported Services

- ◆ GbE, 10/40/100Gb Ethernet
- ◆ 2/4/8/10/16/32G FC
- ◆ STM-64/OC-192
- ◆ OTU2/2e/3/4

Standards Based

- ◆ GCM-AES-256 encryption
- ◆ FIPS 140-2 Level 2 compliant
- ◆ Common Criteria EAL2 certified
- ◆ CNSA Top Secret Suite
- ◆ ECC CDH Diffie-Hellman
- ◆ Authentication using SHA-384



COMMON CRITERIA