



### **Description**

**Proscend 190-T** is a compact G.fast SFP (Small Form-factor Pluggable) modem with electrical interface specified by a MSA (Multi-Source Agreement) that can be integrated with any switch/router platform and end devices. The **190-T** G.fast SFP delivers data rate up to 1Gbps, and can be easily plugged into any CPE Gateway which has a SFP cage on board. In order to be recognized by the host device after inserting to SFP slot, the **190-T** G.fast SFP follows SFF-8472 first 128 byte format and let Host to read these 128 bytes information prior to loading the program into SFP device through 2-wire I2C interface.

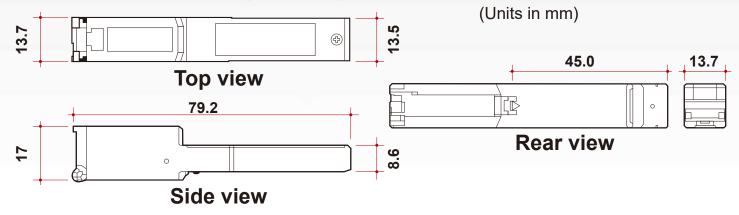
**Proscend 190-T** SFP has an ultra-low power dissipation design in a small form factor SFP package and it can co-exist with legacy xDSL deployments using programmable bandwidth and PSD which allows Service Providers to offer different access technology within One Box. Realizing the modulation of broadband access technology will help ISPs prevent any possible increase on the management cost. On the other hand, using the same user interface will make the upgrade easier and more attractive to end users.

**Proscend 190-T** SFP completes the One Box solution for broadband access which enables users to upgrade their existing Home Gateways to Gigabit speed without paying for the expensive hardware upgrades. Leveraging Proscend xDSL SFP modules will be the most cost-efficient solution for ISPs to upgrade their network service.

### **Features**

- Compliant with ITU G.fast standards G.9700 and G.9701
- Max 1Gbps speed over existing copper wire
- Low power dissipation design
- Wide operating temperature
- Compact design for smart CPE migration

#### **MECHANICAL DIMENSIONS**



# Proseemd 190-T

# PRDSCEND Grast

### **Key features**

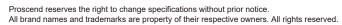
| G.fast Features     |                                    | OAM Features  |  | Advanced ITU Features |  |
|---------------------|------------------------------------|---------------|--|-----------------------|--|
| Frequency band      | 2.2MHz to 106MHz                   | SOC, EOC, RMC | Compliant                                | Vectoring             | Linear vectoring (CPE)   |
| Modulation          | Discrete Multi Tone (DMT)          | SRA           | Seamless Rate Adaption                   | NTR                   | NTR transport on G.fast  |
| Duplexing           | TDD (Time Division Duplexing)      | Bit Swapping  | Compliant                                | ToD                   | Frequency synchronize and Time synchronize                       |
| Sub carriers        | 2048 carriers with 12 bits/carrier | RPA           | RMC Parameter Adjustment                 |                       |  |
| Sub carrier spacing | 51.75kHz                           | FRA           | Fast Rate Adaptation                     | Other Features        |  |
| ANDR                | 1Gbps<br>(Aggregate Net Data Rate) | TIGA          | Transmitted Initiated Gain<br>Adjustment | QoS                   | Flexible packet classify based on<br>Ether Type, VLAN ID or VLAN |
| FEC                 | Trellis coding                     |               |  |                       | Priority (supports QinQ)   |
|                     | Reed-Solomon coding                |               |  | EBM                   | Ethernet Boot & Management                                       |
| Maximum TX power    | 4dBm                               |               |  |                       |  |
|                     |                                    |               |  |                       |  |

## **Specifications**

|             |                       | Compact & Robust RJ-45 connector SGMII/ SERDES connect to host                                   |  |
|-------------|-----------------------|--|--|
| Hard        | lware                 | Access to transceiver function via I2C (SFF-8472) or Ethernet bus for management & configuration |  |
|             |                       | LED1: MT5321 G.fast SFP link status LED (YELLOW)   |  |
|             |                       | LED2 : SGMII activity LED (GREEN)  |  |
| Soft        | ware                  | Support Ethernet Boot mode and Management (EBM)  |  |
| 3011        | ware                  | Linux SDP driver for managed device  |  |
| Power Re    | equirement            | 2 W  |  |
| Power       | Supply                | 3.3 V  |  |
|             | Operating Temperature | $0^{\circ}$ C ~ +75°C (SFP cage)   |  |
|             | Storage Temperature   | -20 ~ +85°C  |  |
|             | Operating Humidity    | 10% to 90%   |  |
| Environment | Operating Humidity    | (non-condensed)  |  |
|             | Storage Humidity      | 5% to 95%  |  |
|             | Siorage Humidity      | (non-condensed)  |  |
|             | Surge Protection      | 4KV  |  |
| Certif      | ication               | CE / FCC   |  |

### **Order information**

| Model No. | Description      | Connector |
|-----------|------------------|-----------|
| 190-T     | G.fast SFP Modem | RJ-45     |



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