# Xentino

**VS90T** G.Fast SFP TELCO MODEM

## **KEY 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

# V590T G.FAST SFP

#### **PRODUCT OVERVIEW**

**Xentino VS90T** 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.

**Xentino VS90T** G.Fast SFP modem complies with the ITU-T **G.9701/ G.9700** G.fast standard which can deliver data rate up to **1Gbps.** This G.fast SFP 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, **Xentino VS90T** 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.

**Xentino VS90T** 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 tooffer 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.

**Xentino VS90T** 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 Xentino xDSL SFP modules will be the most cost-efficient solution for ISPs to upgrade their network service.



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### **Features**

G.fast Features		OAM Features		Advanced ITU Features	
Frequency band	2.2MHz to 106MHz	SOC, EOC, RMC	Compliant	G.inp	Retransmission
Modulation	Discrete Multi Tone (DMT)	SRA	Seamless Rate Adaption	Vectoring	Linear vectoring (CPE)
Duplexing	TDD (Time Division Duplexing)	Bit Swapping	Compliant	NTR	NTR transport on G.fast
Sub carriers	2048 carriers with 12 bits/carrier	RPA	RMC Parameter Adjustment	ToD	Frequency synchronize and Time synchronize
Sub carrier spacing	51.75kHz	FRA	Fast Rate Adaptation		Other Features
andr	1Gbps (Aggregate Net Data Rate)	TIGA	Transmitted Initiated Gain Adjustment	QoS	Flexible packet classify based on Ether Type, VLAN ID or VLAN
FEC	Trellis coding				Priority (supports QinQ)
	Reed-Solomon coding			ЕВМ	Ethernet Boot & Management
Maximum TX power	4dBm				
Handshake	ITU-T G.994.1				

# **Specifications**

Hardware		Compact&Robust RJ-45 Female Connector		
		SGMII / SERDES connect to host		
		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)		
Software		Support Ethernet Boot mode and Management (EBM)		
		Linux SDP driver for managed device		
Power Requirement		3.3V, 2W		
	Operating Temperature	-0 ~ +75°C (SFP cage)		
	Storage Temperature	-20 ~ +85°C		
	On a matin of the maidity of	10% to 90%		
Environment	Operating Humidity	(non-condensed)		
	Storage Humidity	5% to 95%		
		(non-condensed)		
	Surge Protection	4KV		
Certification		CE / FCC		

# **Ordering Information**

Model	Description
VS90T	G.Fast SFP TELCO MODEM (RJ45)