

# SPECIFICATION

## OPTICAL TERMINATION BOX

<b>Model</b>	<b>VSOF-OTB-5G MUX</b>
<b>Spec. No.</b>	<b>VSS-1809-OTB-5G MUX</b>
<b>Distribution Depts.</b>	<input type="checkbox"/> <b>Quality Assurance Team</b> <input type="checkbox"/> <b>Manufacturing Division</b> <input type="checkbox"/> <b>Sales Division</b> <input type="checkbox"/> <b>Management Division</b>
<b>Revision</b>	<b>18. 09 (Rev.0)</b>

**Reviewed by** R&D Center  
Person in charge \_\_\_\_\_

**Approved by** R&D Center  
Manager \_\_\_\_\_

**Approved by** R&D Center  
Chief \_\_\_\_\_

## 1. Introduction

### 1.1. General

This specification covers the minimum standards and requirements for the construction, properties, testing and packing of the optical termination box intended for installation internally in customers premises, wall mounted in telecommunications network and hung in the building.

### 1.2. Description

OTB(Optical Termination Box) will be used to connect between distribution cables for medium and low density fiber count installation to drop individual cable into customer premise in fiber optic network.

Optical Termination Box should include the plastic casing, fiber connectors, inner panel and other necessary materials for the termination of optical fiber cable.

### 1.3. Reliability

The quality of Optical Termination Box is critical to reliable optical transmission performance. The product shall be produced with ISO-9001 certified production facilities and quality control system is applied the process from product design to packaging.

## 2. OPTICAL TERMINATION BOX

### 2.1. General

OTB consists of BODY for 2 inlet optical cable and 2 flexible, Splice Tray for connectors and Cover. Placement of the incoming cables shall allow convenient access for installation, maintenance and subsequent termination of additional secondary cable.

All components of OTB shall be of high quality design, workmanship and finish.

### 2.2. Configuration.

2.2.1. Used for splicing fiber optic cables, connection fiber optic circuits and storing excess fiber

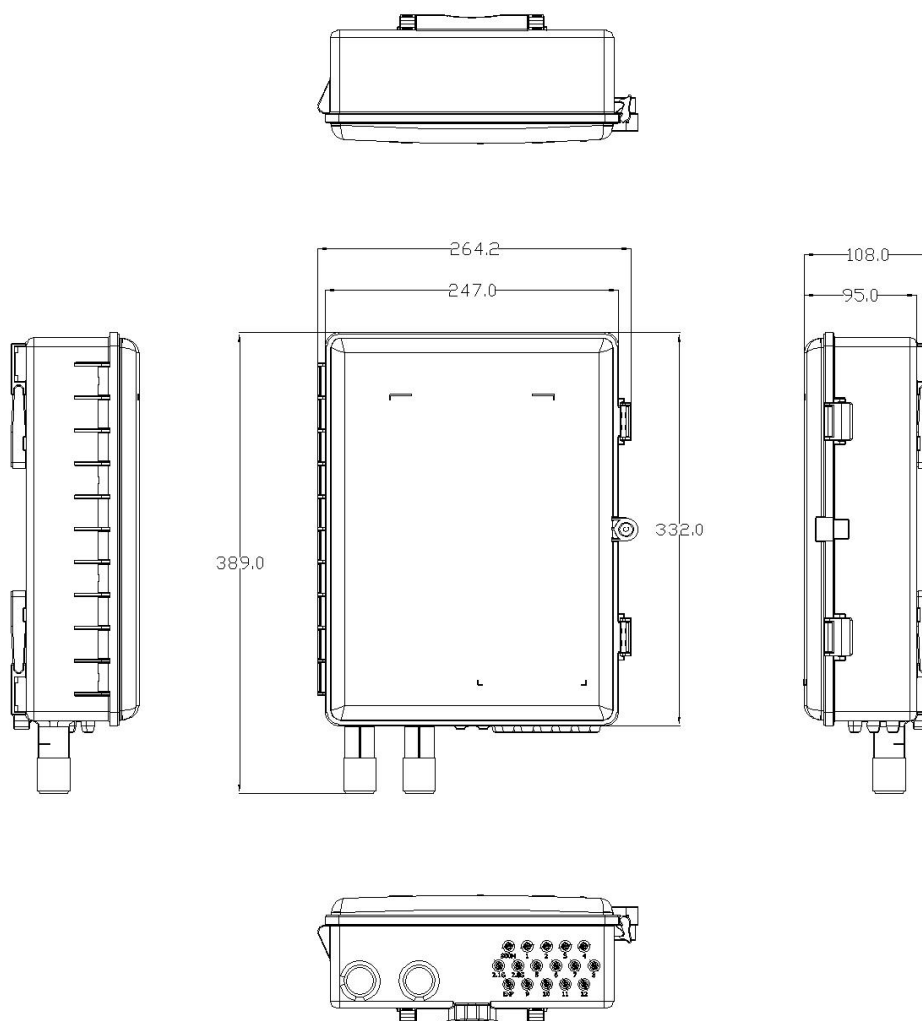
2.2.2. Simple and clearly arranged cable management

2.2.3. Built in screw key lock for security

2.2.4. Enough work space and efficient splicing

2.2.5. Various installation conditions (Poll, Wall, Building, etc)

2.2.6. Silicone gasket for thorough protection of rain prevention.



**[OTB-5G MUX]**

**2.3. Configuration.**

Item	OTB-5G MUX
Size(mm)	247 X 332 X 95mm (9.7 X 13 X 3.7in)
Inlet Port	Main 2EA / Drop 16EA
Cable Dia (mm)	Main Max. $\phi$ 16.5 / Drop $\phi$ 3.5
No. of Splice Tray	1EA
Tray Capacity	12C(Max. 24C)
Adapter Capacity	LC Quadplex (Max. 3EA) / SC Duplex (Max. 3EA)
Splicing method	Fusion
Splice Protector	Heat shrinkable sleeve
Main Material	PC/ABS

### 3. TEST CERTIFICATION

#### 3.1. General

This section specifies the OTB and its material physical, chemical environmental and mechanical requirements and the tests to be applied for the determination of compliance with these requirements. The materials of the OTB shall be compatible with all cable components and splicing materials

#### 3.2. Workmanship

All components of the OTB shall be high quality design, workmanship, and finish.

All components shall be free of pinholes, cracks, sharp edges or other defects which may detract from the service requirements of the OTB. All metal and plastic welds shall be a high standard of workmanship.

#### 3.3. Materials

The components of the OTB and its accessories shall not contain any hazardous or toxic materials. All the components shall be stainless steel or AL with equivalent corrosion resistance. The OTB shall have a robust construction.

#### 3.4. Tests of Assembled Optical Termination Box

##### 3.4.1. Cable Clamping Test.

After assembling the OTB with cables, no torsion or bending of cables nor cracking of components occurred. On completion of the test the sample shall be subjected to the axial pull out test.

##### 3.4.2. Axial Pullout Test

A load of  $F=D \times 1000N/45$  (D: Cable diameter) shall be applied to each cable in the longitudinal axis of the cable for 30 minutes. There shall be no pull-out of cables from the box.

##### 3.4.3. Vibration Test.

The cables connected to the sample shall be rigidly clamped 500mm from the OTB. The box shall be vibrated at a frequency of 10 ~ 55 ~ 10 Hz and an amplitude of 0.75 mm for 20minites. The cycle takes 60 minutes and vibrates in vertical direction. On completion of the test neither separation or loosening of components nor damage shall be occurred.

**4. DELIVERY****4.1. Packing**

The Optical Termination box shall be packed with a complete kit containing all components necessary for installation. Each item shall be covered with protective materials to prevent scratching or damages during shipping or storage. Complete assembly and installation instructions in English shall be provided with each packaged unit. The final shipping cartons shall have sufficient strength and durability to protect the contents in the process of handling during storage and shipping by land, sea, or air

**4.2. Marking**

The details given below shall be distinctively marked in English with a weatherproof material, on at least two sides of the shipping carton.

- The company to be delivered
- The product item
- Country of origin
- Manufacturer's name and/or trademark
- Date of manufacture
- Caution mark

Each OTB shall be marked with the company, the month and year of manufacture and the trademark and/or name of manufacturer in legible color.

- The End of Specifications -