



# **FiberSaver 25G**

## **25GBase Fiber Transport**

### **USER MANUAL**

252 Indian Head Road, Kings Park, NY 11754 USA  
(877) 685-8439 / (516) 671-7278 / FAX (516) 671-3362  
[sales@multidyne.com](mailto:sales@multidyne.com)  
[www.multidyne.com](http://www.multidyne.com)

## Table of Contents







Table of Contents.....	2
Document Revisions.....	2
Safety Info.....	3
1. Overview.....	5
2. Feature Descriptions.....	6
3. Operation Connection Diagram.....	7
4. Accessories.....	8
5. Specifications.....	9
Contact Info.....	10

## Document Revisions

Revision	Description	Date	Author
A	Initial	7/13/2023	SDP

## Safety Info

- Do not use this apparatus near water.
- Clean only with lint free dry cloth.
- Do not block any ventilation openings.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not defeat the safety purposes of the grounding- type plug. A ground type plug has two blades and a third grounding prong. The third prong is provided for your safety. If the provided plug does not fit in to your outlet, consult an electrician for replacement of the obsolete outlet.
- Install in accordance with the MultiDyne® installation instructions.
- Install all peripheral equipment (cameras, routers, etc.) accordance with the manufacturer's instructions and safety requirements.
- Protect the power cord from being walked on or pinching particularly at plugs, convenience receptacles, and point where they exit from the apparatus.
- Only use attachments/accessories specified by MultiDyne®.
- Use only with the cart, rack, stand, tripod, bracket, or table specified by MultiDyne®, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- Follow all local Electrical Codes for Grounding, Lightning Arrestment and Surge Protection. Unplug this apparatus during lightning storms or when unused for extended periods of time.
- All Electrical Work to the facility must be performed by a qualified Licensed Electrician. All local Electrical Codes must be followed and, if necessary, must be inspected by a Local or State Inspector.
- All servicing of MultiDyne equipment must be performed at the factory by a MultiDyne trained service technician or engineer.
- Throughout this manual, several Warnings and Cautions and Notes may be presented to alert the user to important safety or operating information.
- Always adhere to local building, safety and fire prevention codes during the installation and operation of this product.

	<b>Warning</b> –indicate danger that requires proper procedures or practices to prevent injury or death to personnel.
	<b>Cautions</b> indicate proper procedures or practices to prevent damage to equipment or property.
	<b>Warning</b> –The safe operation of this product requires that a protective earth connection be provided. A grounding conductor in the equipment's mains supply cord provides this protective earth. To reduce the risk of electrical shock to the operator and service personnel, this ground conductor must be connected to an earthed ground. The mains plug shall remain readily operable.
	<b>Warning</b> –The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.
	<b>Warning</b> - This symbol on the equipment indicates for use at altitudes not exceeding 2000 m.
	<b>Warning</b> - Contact your local authority for further details on the correct disposal of this waste, in accordance with your national legislation.

- Use only power cords that were shipped with specified for this product and certified for the country of use.
- Connect the unit only to a power source with the specified voltage rating.
- Unless otherwise stated in the Installation Instructions, and in adherence to local Electrical Codes

---

MultiDyne® Equipment should only be plugged into a standard 15 amp dedicated circuit.

## Laser Safety Information

This unit is classified as a CLASS 1 LASER PRODUCT according to EN60825-1 (EU) and FDA 21CFR 1040.10 (USA). Class 1 laser products are considered safe and do not result in biological hazard if used according to these instructions.



	<b>Warning</b> – Use of controls, adjustments, or performance of procedures other than those specified herein may result in hazardous radiation exposure.
	<b>Warning</b> – Never look directly into the end of the optical fiber while either end of the system is operating.
	<b>Warning</b> – Never clean an optical fiber connector on equipment or cable that is carrying light.
	<b>Warning</b> – Always use dust caps on fiber optic connectors when cables are not connected. This will protect the connector from damage and accidental exposure of a human eye to an operating laser.

## 1. Overview

The FiberSaver 25G provides a cost-effective solution for network expansion and capacity enhancement. It eliminates the need for deploying and maintaining multiple fiber links, which can be expensive and time-consuming. With CWDM technology, existing fiber infrastructure can be leveraged to its maximum potential. By utilizing different wavelengths, FiberSaver 25G effectively increases the capacity of the network infrastructure without the need for additional physical fiber runs. The system allows for the consolidation of multiple 25G network links onto a single fiber. This consolidation simplifies the network infrastructure, reduces complexity, and optimizes resource utilization, resulting in a more streamlined and manageable network.

FiberSaver 25G allows transmission of optical signals over longer distances, up to 10km, by reclocking and re-transmitting the source signals. Meet the ever-increasing demands of data transmission in multi-camera or other 25GBase Ethernet applications.

### Key Features

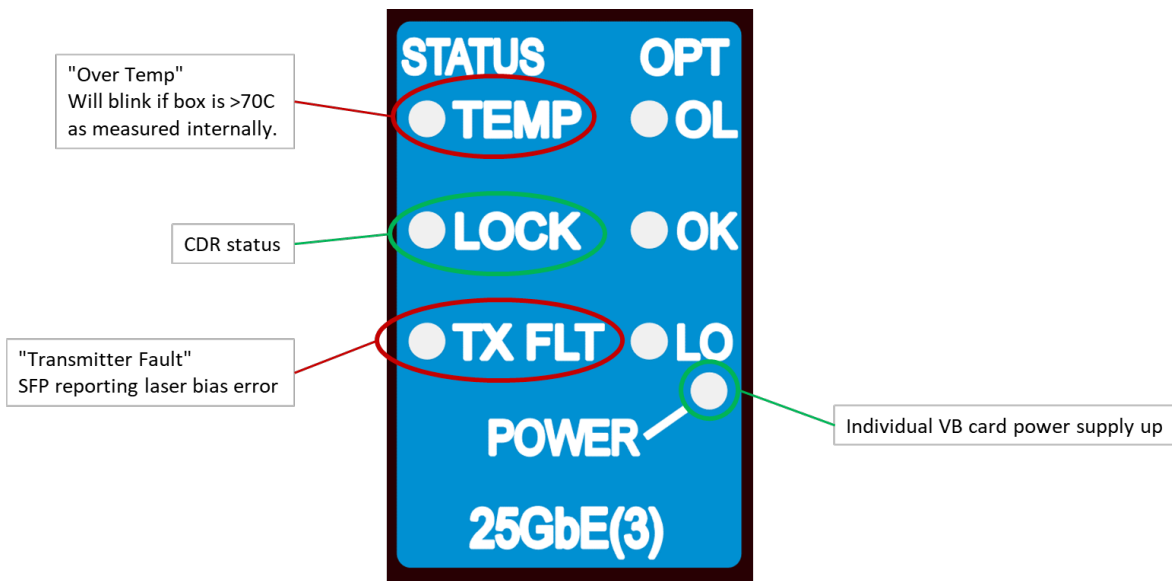
- Send (3) bi-directional 25 GE links over 1 fiber
- Built-in CDR (auto-sensing)
- Up to 25.78 Gbps Bi-directional Data Links
- Supports 25GBASE, CPRI Option 10 @ 24.33Gbps
- Built-in optical power meter (Inputs only) for easy system setup and status monitoring
- Choose between ST, SC, or LC fiber connections
-

## 2. Feature Descriptions

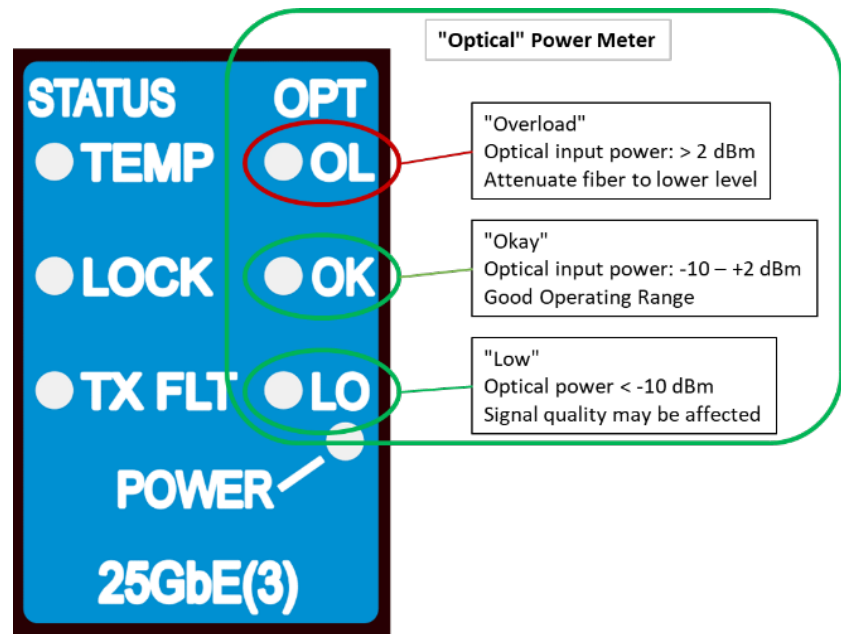
### 2.1 Front LED Descriptions

There are 2 columns of LEDs for each VB card. The left side covers signal and system status. The right side is a real-time optical power meter for the optical input.

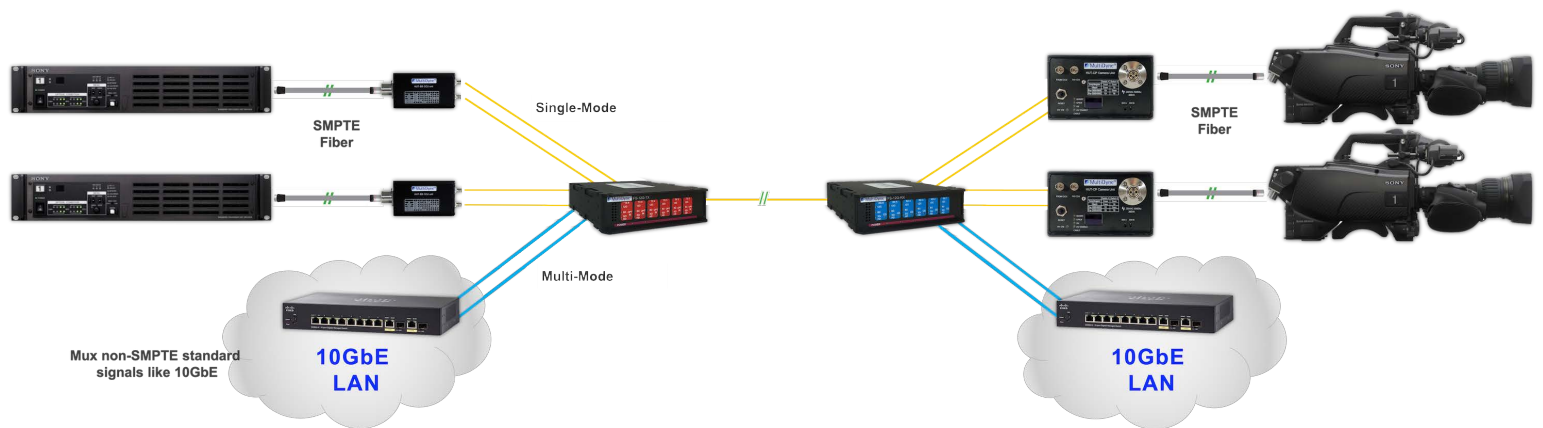
#### Status



#### Optical Meter



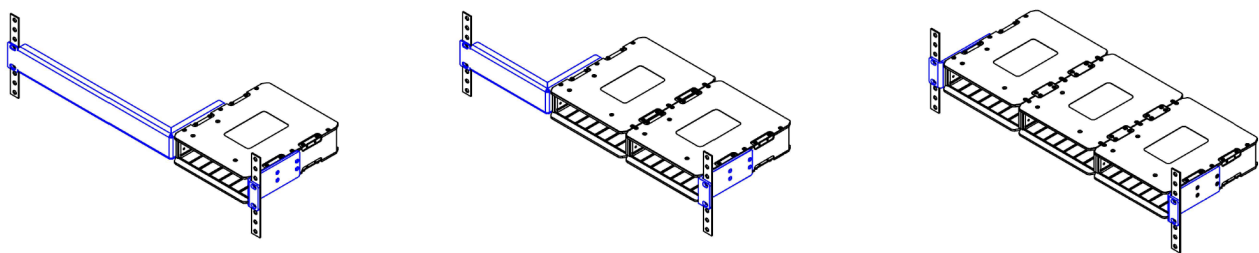
### 3. Operation Connection Diagram



## 4. Accessories

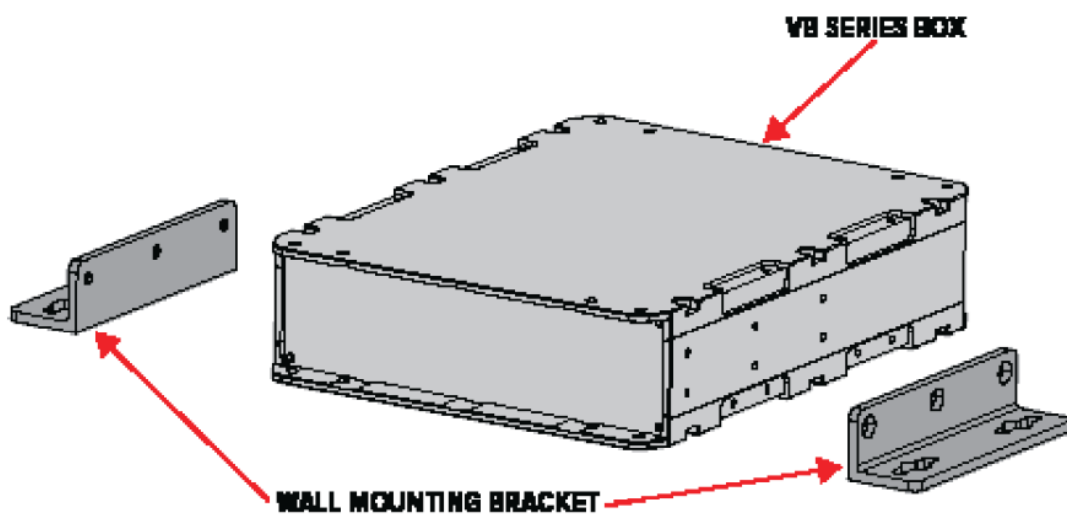
### 4.1 Rack Mounting Installation

Part Number	Description
<b>RM-1RU-VB6</b>	VB6 MOUNTING KIT for 1, 2, or 3 VB6 units



### 4.2 Wall Mounting Kit

Part Number	Description
<b>WMK-VBSERIES</b>	Wall Mount Kit, VB Series 2, Universal for VB4, VB6, VB10





## 5. Specifications

**Operating Temperature** 0 to 70° C

### 5.2 Electro-Optical

<b>TX Output Power</b>	-1 – +4 dBm
<b>RX Sensitivity</b>	-12 dBm
<b>Fiber Type</b>	Singlemode
<b>Fiber Polish</b>	UPC (Ultra-physical contact)
<b>Fiber Connectors</b>	ST, SC, or LC
<b>Optical Power Meter Accuracy</b>	+/- 2dB
<b>CWDM Wavelengths</b>	1271–1371
<b>Optical Budget (typ.)</b>	12dB
<b>Power Connector</b>	2.5mm

### 5.2. Power

<b>Input Voltage</b>	9–24 VDC
<b>Power Consumption</b>	5W

### 5.3. Data

<b>MAX Data Rate</b>	25.78 Gbps
<b>Supported Data</b>	25GBASE, CPRI Opt. 10 (24.33Gbps)

## Contact Info

Contact [support@multidyne.com](mailto:support@multidyne.com)

MULTIDYNE, the Multidyne logo,  
are registered trademarks of MULTIDYNE Electronics, Inc.

Copyright 2023 MULTIDYNE Electronics, Inc., Kings Park, New York.

Printed in the United States of America.

All Rights Reserved.

Contents of this publication may not be reproduced in any form without the written permission of  
MULTIDYNE Electronics, Inc.

This product was designed and manufactured in the  
UNITED STATES of AMERICA