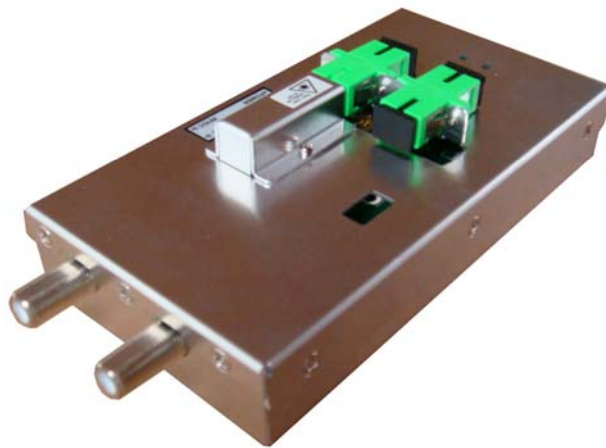


Specification
of
TV Receiver Module for Optical Network Unit
TVRM 870



**Universal Microelectronics
Photonics Division
Catalog 2008~ 2009**

TV receiver module for Optical Network Unit

Features

- AM-FDM transmit method
- Excellent CNR/ CSO/ CTB performance
- PAL or NTSC system
- Frequency bandwidth 45 ~ 870MHz
- Optical input power range -2 ~ -8 dBm
- Compact module design

Applications

- V-PON
- E-PON
- B-PON
- CATV
- FTTH

1. General Information

1.1 Optical Specifications

Transmission Type	AM-FDM
Detector	PIN photo diode
Wavelength, nm	1550±10
Return Loss, dB, min.	50dB by SC/APC connector
Fiber Type	Corning SMF-28
Optical Input Power Range, dBm	-8 to -2
Optical Connectors	SC/APC

1.2 RF Specifications

Transmission Frequency Bandwidth	45 ~ 870MHz	
Transmission type	VSB-AM TV	
Max. Transmission Channel	PAL 64	NTSC 78
CNR, dB, min. (※1)	48	47
CSO, -dBc, min. (※1)	64	63
CTB, -dBc, min. (※1)	66	65
Output Level, dBmV/Channel (※1)	20	
Flatness, dB, max.	±1	
Return Loss, dB, Min.	14	
Output Impedance, Ohms	75	
RF Connectors	F-type (Female)	

(※1) Optical Modulation Index=3.5~4.0%, Optical input power: -5dBm

1.3 LED Indicators

PWR LED (Green)	Indicates the module is power on status.
OPT IN LED (Green)	Indicates optical input power in normal range. More than -10dBm

1.4 General Specifications

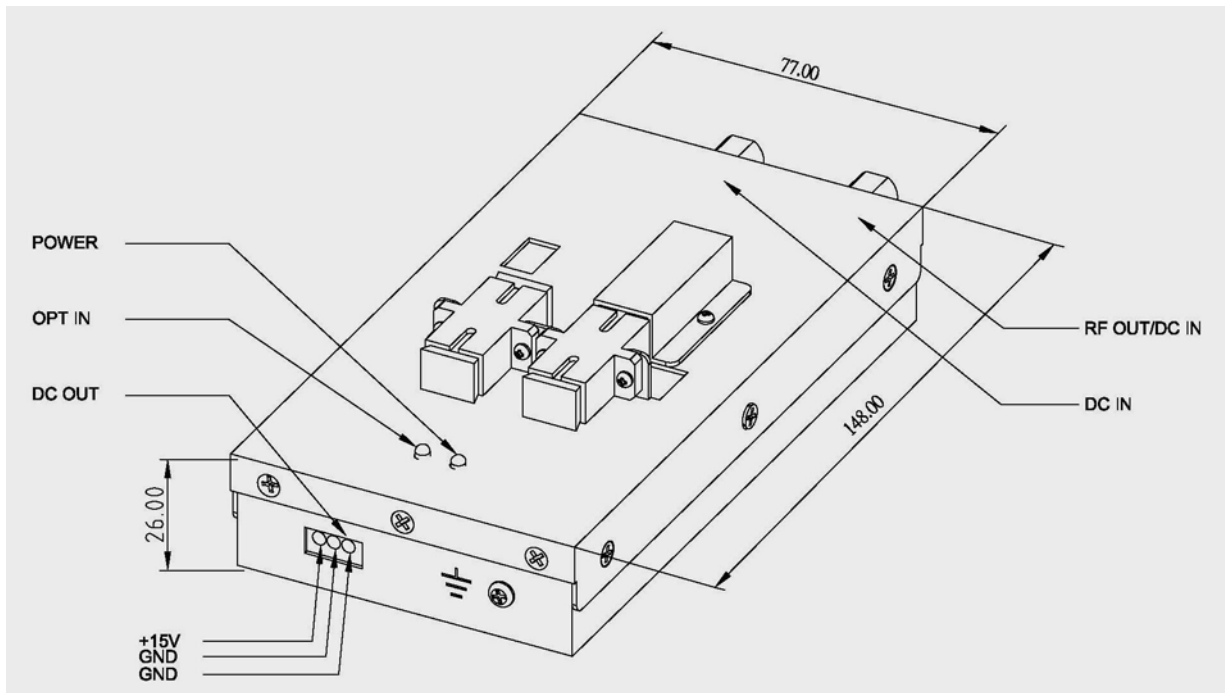
DC Input Power	15Vdc / 400mA – 6W or 12Vdc / 400mA – 4.8W	
DC Connectors	Front (F-type Female) , Rear (EH2.5mm-3pin Socket) to M.C.	
Surge Protection, KV	15 @ 1.5x50us	
Operating Temperature, °C	0 to +50	
Operating Humidity, %	5 to 90	
Physical Dimensions, mm.	L:	148 (without RF port) 163 (with RF port)
	W:	77
	H:	26 (without optical adapter protection cover) 37 (with optical adapter protection cover)
Weight, g	250g	

2. Packing List

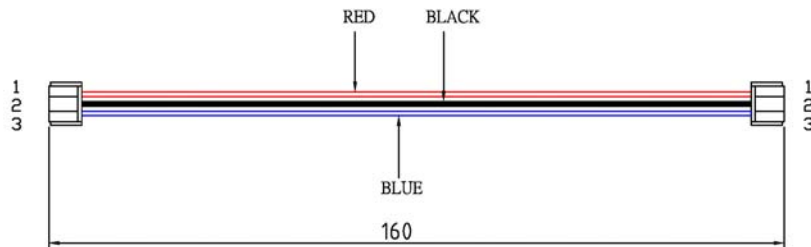
UMEC Provide

Item	Name	QTY
1	TVRM	1
2	DC By Pass Cable	1
3	Test Report	1
4	User Manual	1

3. Product Drawing



4. Product Accessories (DC By Pass Cable) Drawing



EH2.5 L=160mm

5. Package Picture



* User Manual is below the TVRM product

Package Dimensions, mm.	L:205 x W:235 x H:77
Package Weight, g	400g



Ordering Information

P/N : PD-TVRM00004

Note :

Please contact with Sales Representative if you have any customized function or modification for this product.