
2681MHz Compatible
CATV/UHF • B S • C S
In-building Optical Receiver

FSK-SMO101



Version History

Change Part No.	Change Page	Change Content	Change Date
ONU		Enactment (Enactment day'May 02, 2017)	
With filter		Enactment (Enactment day'Feb 17, 2018)	
Update LED		Enactment (Enactment day'Oct 21, 2019)	
With FSK		Enactment (Enactment day'Jun 16, 2020)	

Description

It is an optical receiver used for optical transmission system which transmits CATV-BS and CS in 2681 MHz wide band.

By sending a system with an optical fiber with a low transmission loss, the high quality image is transmitted to the terminal without relay amplification to BS / CS band castle.

Feature

(1) Supports 4K satellite broadcasting

Since the transmission frequency of the BS • CS band is 1032 to 2681MHz, it supports generation broadcasting services for 4K satellite broadcasting.

(2) RF high output

The output level of the optical receiver is high, and the system design ability for home distribution is easy.

(3) Optical input level indicator

Equipped with an indicator light that lights green when the optical input level is normal from $\ominus 14$ to $\ominus 4$ dBm, lights red when the input is excessive (more than $\ominus 4$ dBm), and turns off when the level drops (less than $\ominus 14$ dBm).

(4) Supports various operations

Supports both "CATV reception" and "UHF reception"

Data sheet			
Optical Receiver 【FSK-SM0101】			
Event		Specification	
Bandwidth		70~770MHz	1032~2681MHz
Transmission Wave Number	model (CATV)	112 waves	50 waves
	mode2(UHF)	12 waves	
Using Light		Single Mode	
Optical Wavelength		1550±10nm	
Optical Input Level		⊖14~⊖4 dBm	
AGC Action Range		⊖14~⊖4dBm	
Optical Modulation	model(CATV)	2%	3%
	mode2(UHF)	3%	
Rated Output	model (CATV)	85duV	
Frequency Characteristics In Frequency band		Within 6dB	
AGC Feature		Within ±4dB	
Gain Stability		Within ±2dB	Within ±3dB
Output Impedance		75 Ω (F Type Terminal)	
Optical Connector		sc-spc	PC Type
VSWR		Below 2	Below 2.5
C/N	model (CATV)	More than 30dB/⊖ 12dBm	-
	mode2(UHF)	More than 33dB /⊖ 12dBm	
CIN		-	Below⊖28dB/⊖10dBm Below⊖24dB /⊖12dBm
BER※(2)		Below e ⁻⁹	-
Output measurement terminal		⊙20dB (F Type Terminal)	
Lightning Resistance		± 15kV (1.2/50/zs) Withstand Surge Voltage	
Unwanted radiation		Below 34dB“ V/m	
Using Temperature Range		⊖ 10~⊙40° C	
Power Supply		AC100V±10V 50 - 60Hz	
Current		About 5.0W / About 10VA	
AC Cord Length		About 0.7m	
Appearance Size		W156×H122×D54mm	
Quality		About 310g	
Symbol			
Operation Indication Light(Optical Receiver)			
Event	Model		Indication
Optical Input Level(Optical Input)	Optical Input more than⊖4dBm		Green twinkle
	Optical Input ⊖14~⊖4dBm		Green Light
	Optical Input Less than⊖14dBm		Red twinkle
Select Indication	CATV	Satellite	
	On	On	Green Light
	Off	On	Orange

	On	Off	Orange
	Off	Off	Red Light

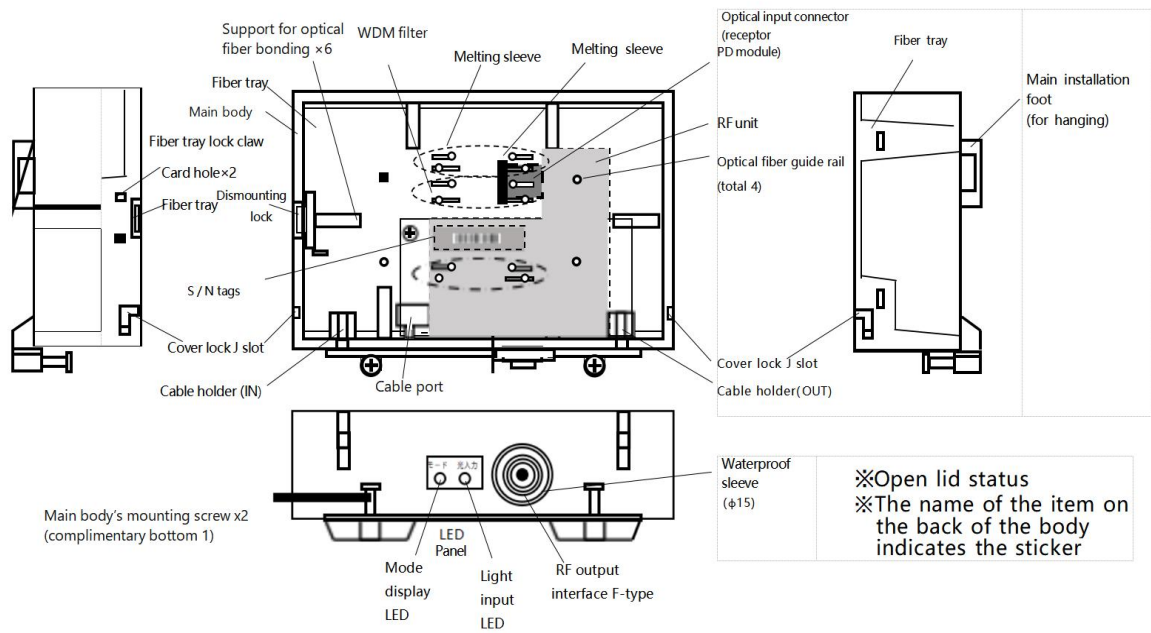
*The value of output level /Frequency Characteristics In Frequency /AGC feature/C/N.CIN is achieved by using with optical transmitter.

*The value of BER is achieved by using together with optical transmitter and indoor booster .

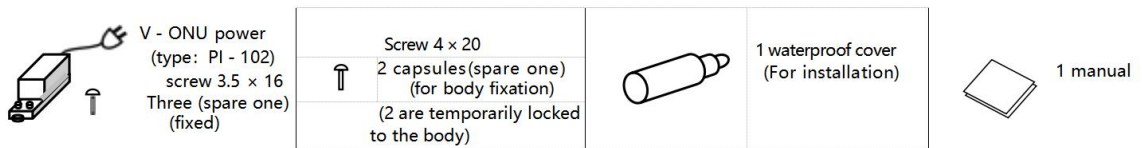
* No condensation

*Naming rule:FSK-SMO101 means with the function FSK,SMO101 means no FSK function.

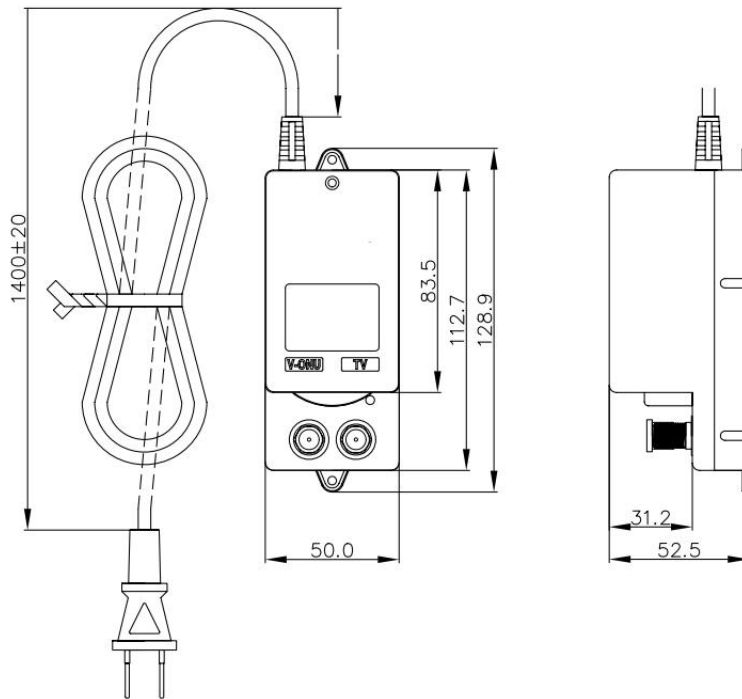
Housing



Accessories



Adapter Dimension



Handling and installation method

- Remove the lid.



Hold the lid and the body separately, and slide it open.

- Remove the fiber tray.



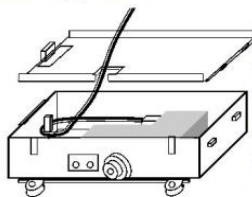
Roll the knob of the hinge inside. pull it up

- Remove the optical connector protection cap



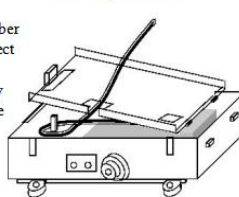
Tightly pluck the protective cap (black part) and pull out in the left direction

- Connecting optical connectors



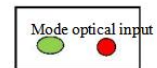
Remove the fiber tray and connect the optical connector. Pay attention to the rotation and pinch of the optical cable

- Fiber tray installation



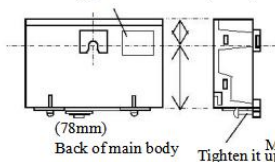
Push down until the hinge locks

- Led seal

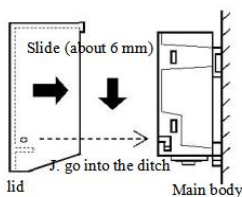


All pass: green light Input level drop: flashing red
 Bs /CS cut: flashing green Input level appropriate: green lighting
 All cut: red light Input level high: flashing green

- Installation of the main unit (figure with lid removed) part name sticker (26mm)

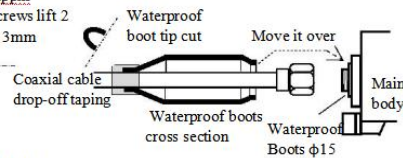


- Installation of lid

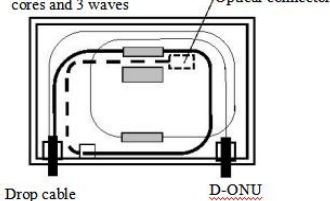


Attached tapping screws lift 2 ~ 3mm

- Connecting coaxial cable



- Example of connection of 2 cores and 3 waves



- Example of connecting 1 core and 3 waves

