



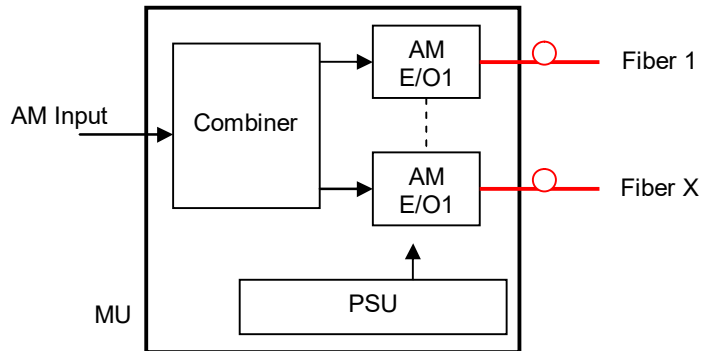
Sunny SAM series – AM Fiber Optical Repeater

Model : SAM-500'1700KHz-MU(X)-44 And SAM-500'1700KHz-RU-44

Where X is number of RU support, 1-8

Model : SAM-500'1700KHz-MU(X)-44

System Block Diagram



MU Electrical Specification

Frequency (kHz)	500-1700
VSWR	≤1.5
Insertion Loss (dB)	≤11
Ripple (dB)	≤0.8

MU Optical Specification

Optical Output Power (dBm)	4±2
Optical wavelength (nm)	Master: 1310, Slave: 1550
Gain (dB)	0±2
Gain Flatness (dB)	≤2
IP3 (dBc)	≥23
Optical Connector	SC/APC
Maximum RF input (dBm)	≤ +10

MU Power Supply and Mechanical Specification

RF Connector	N-Female X 1
RF Connector Impedance (Ω)	50
RU Capacity	Max. 8
Power Supply	AC220V±44V; 50Hz/60Hz
Max. Power Consumption (W)	≤100
Heat Dissipation (W)	≤60
Power Supply Safety Standard	EN 60950-1 Short circuit, open circuit, over load and over voltage protection
Weight (kg)	≤ 20
Dimension WxLxH (mm)	19" Rack mount - 3U (482x383x134) for 1-4 AM E/O module 19" Rack mount – 5U (482x500x223) for 5-8 AM E/O module

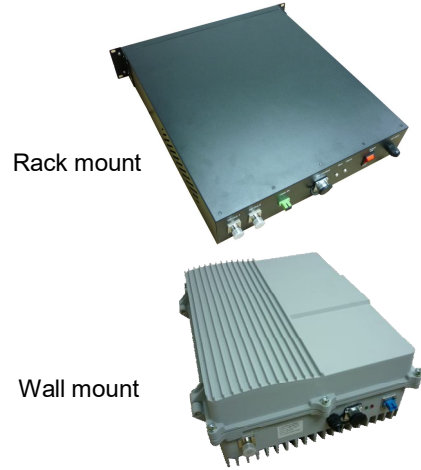
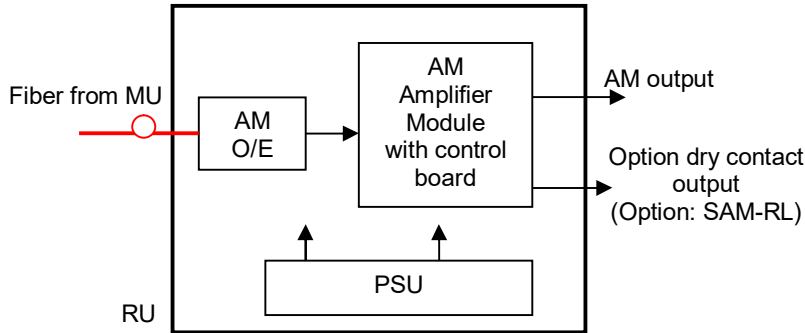
Ordering Information

Model: SAM-500'1700KHz-MU(X)-44	Confirm X in MU: how many RU will be connect to each MU, 1-8
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Model : SAM-500'1700KHz-RU-44

System Block Diagram



RU Electrical Specification

Frequency Range (kHz)	500-1700
Output Power (dBm)	44±3 (25W)
Gain (dB)	55
Gain Adjustment (dB)	≥20/1dB step (DIP-switch)
Gain flatness (dB)	≤ ±2
ALC	Output power ±0.5dB@normal operation
ALC range (dB)	≥15
Maximum RF input without damage (dBm)	≤+5
Minimum RF input (dBm)	≥-25
1dB Compression point (dBm)	≥44
3 rd Order Interception Point (dBm)	≥52
Noise Figure (dB)	≤10
Input VSWR	<2:1
Spurious attenuation (dBc)	<40
Harmonic attenuation (dBc)	<10

RU Optical Specification

Optical wavelength (nm)	Master: 1310, Slave: 1550
Gain (dB)	0±2
Gain Flatness (dB)	≤2
IP3 (dBm)	≥23
Optical Connector	FC/APC or SC/APC
Maximum Optical input (dBm)	≤ +7
Optical sensitivity (dBm)	≥ -10

RU Power Supply and Mechanical Specification

Connector	N(F)
I/O Impedance (Ω)	50
Power Supply	220VAC, 50Hz/60Hz
Max. Power Consumption (W)	≤200
Heat Dissipation (W)	≤150
Power Supply Safety Standard	EN60950-1 short circuit, open circuit, over load and over voltage protection
Cabinet Environment Rating	IP 65 for Wall mount, IP20 for Rack Mount
Dimension (mm)	500x440x235 (Wall mount), or 2U, 19" Rack mount 482X500X89 (Option: SAM-RACK)
Cooling	Natural



Indication LED	Green LED : Normal Indication, Red LED : Alarm Indication
Alarm type	High Temperature ($\geq 85^{\circ}\text{C}$, auto shutdown), Devices Failure
Interface	Dry contact alarm output x1 (Option: SAM-RL)
Operating temperature ($^{\circ}\text{C}$)	-20 to +55
Relative Humidity (%)	0~95

Ordering Information

Model: SAM -500'1700KHz-RU-44	AM Remote Unit
Options	SAM-RL : Normal Open (NO) Relay Dry Contact x1 for alarm indication SAM-RACK : Rack mount cabinet.

Technical data are subjected to change without notice – File: SAM -500'1700KHz-MU(X)/RU-44 datasheet 2017V1.1