



STR400 Series – TETRA Channel Selective Line Amplifier

TETRA Line Amplifier (LA) is used to extend the coverage area in passive distribution antenna system (DAS) connecting by coaxial cables. Sunny STR400 Series – TETRA Channel Selective Line Amplifier provides wide range of configurations to address different customer requirement. With supporting maximum 8 TETRA channels selected by user within maximum 7MHz band.

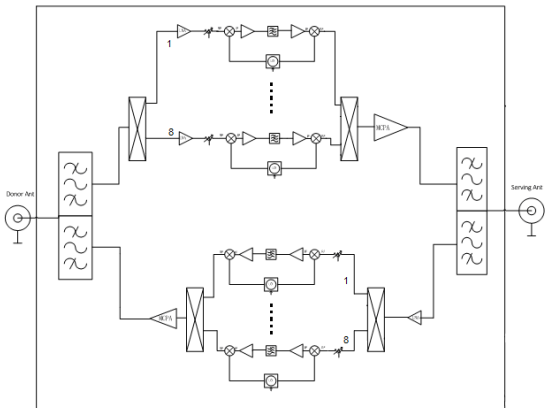
Model: STR400-F1'F2/F3'F4-LA-XC

Where X is 2, 4, 8 channels

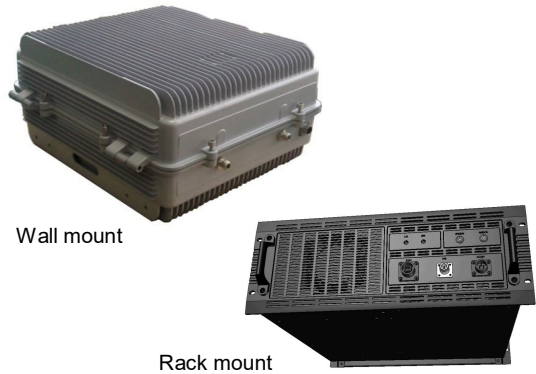
Highlight

- Comply ETSI standard with CE certificate
- Support 380-470MHz
- Support up to 7MHz Bandwidth (Typical 5MHz Bandwidth and 5MHz Guardband)
- Support up to 4 TETRA channels
- Optional remote alarm/control/monitoring/statistics by ethernet or sms
- Optional different kinds of redundancy configuration

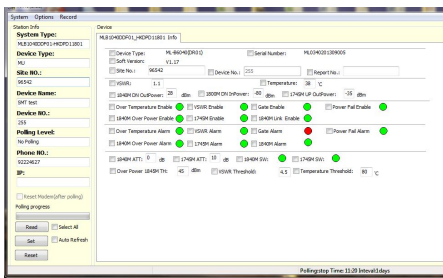
System Block Diagram



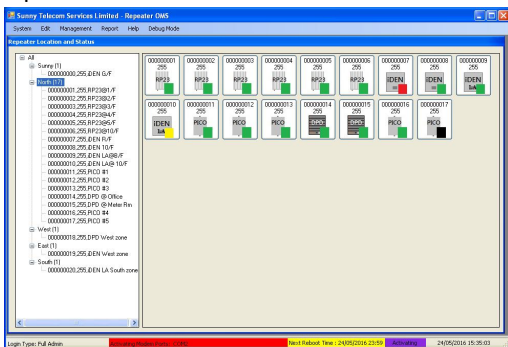
System Outlook



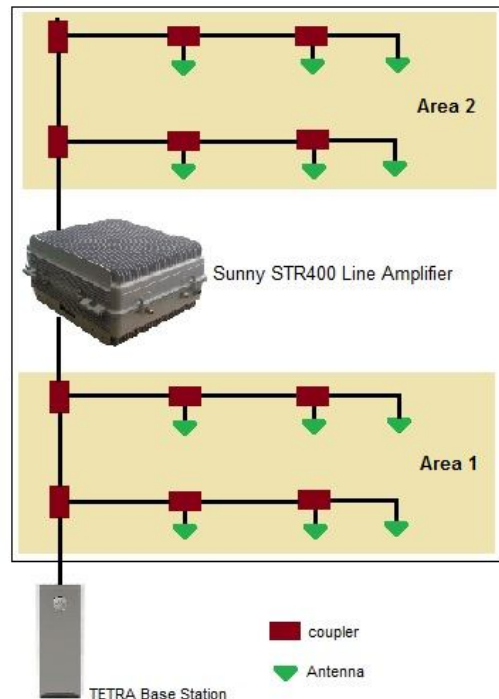
Remote Software



Option: SUN-OMS



Application Example





Electrical Specification

Items	Uplink	Downlink
Frequency Range	F1-F2MHz (within 380-470MHz)	F3-F4MHz (within 380-470MHz)
Bandwidth range	5MHz (Optional 7MHz)	5MHz (Optional 7MHz)
Guardband (F3 minus F2)	≥3MHz	≥3MHz
Number of Channels	2, 4, 8	
Channel frequency	25kHz per channel*	
Output Power Per Channel	2 Channels	-3±2dBm
	4 Channels	-6±2dBm
	8 Channels	-9±2dBm
Max. Gain (1dB per step)	28 to 48±3dB	
Intermodulation attenuation	≤ -60dBc	
Third order intercept	≥ +27dBm @ 2 x -3dBm	≥ +64dBm @ 2 x 34dBm
Max. Input without damage	≤ -10dBm	
Input Sensitivity	2 Channels	≥ -117dBm
	4 Channels	≥ -114dBm
	8 Channels	≥ -112dBm
ALC	△Po≤±1 dBm	
Spurious emissions from RF Port	≤ -36dBm@9kHz~1GHz ≤ -30dBm@1GHz~12.75GHz	
Time Delay	≤10us	
Noise Figure	≤5dB at maximum gain	
VSWR	1.3	
Compliance	Radio: ETSI TS101 789, EN300 392, EN300 394, EN303 035 EMC: EN301 489, Safety: EN60950, Health: EN 50385	

Power Supply and Mechanical Specification

RF Connector	N-Female/50ohm**
Operating Temperature	-25°C ~+55°C
Relative Humidity	Max. 95%
MTBF	Min. 100000 hours
Power Supply	230VAC, 50/60Hz OR -48V DC (option STR400-DC)
Maximum power Consumption	≤200W
Cooling	Natural cooling for wall mount, FAN cooling for rack mount
Heat Dissipation	≤170W for wall mount
Cabinet Environment Rating	IP65 for wall mount, IP20 for rack mount
Local LED	Power – GREEN, Alarm – RED
Alarm types	No AC Power, Over Temperature, Module Failure, VSWR, Over RF Downlink Power, Low RF Downlink Power, Door Open
Remote Control Module	RS232/USB (Standard) Wireless Modem (option STR400-RFM, STR400-WD) Ethernet (option STR400-ETH)
Dimensions	550x440x235mm (wall mount) OR 4U, 19" rack mount, 500mm depth (option: STR400-RACK)
Weight	N.W.33.5kg, G.W.36kg

* User is not allowed to select ±2 channels of the selected channel

** User predefine Simplex or Duplex configuration for I/P and O/P ports during ordering stage

Ordering Information:

Model: STR400-F1'F2/F3'F4-LA-XC	1. Confirm uplink/downlink frequency. F1 to F2 and F3 to F4 are within 380-470MHz and typically 5MHz (Optional ≤7MHz); F3 minus F2 must be ≥3MHz 2. Confirm Nos of Channel - 2, 4, 8
Options	<p><u>STR400-RFM</u>: Sunny Remote Control by RF Modem (SMS)²</p> <p><u>STR400-WD</u>: Sunny Remote Control by RF Modem (wireless data)²(Fixed IP needed)</p> <p><u>STR400-ETH</u>: Sunny Remote Control by Ethernet²</p> <p><u>SUN-OMS</u>: Sunny Remote Control Software (Network management software)</p> <p><u>STR400-TP</u>: With Downlink and Uplink -30dB test ports outside the cabinet</p> <p><u>STR400-RL</u>: With 2 relay input and 2 relay output as external alarm (dry contact)</p> <p><u>STR400-UPS</u>: Sunny Uninterruptible Power Supply</p> <p><u>STR400-DC</u>: Using -48VDC as power supply input</p> <p><u>STR400-RACK</u>: Rack mount cabinet with FAN cooling</p> <p><u>STR400-HSPSU</u>: Sunny Hot Standby Power Supply Unit¹</p> <p><u>STR400-HSWU</u>: Sunny Hot Standby Whole Unit¹</p> <p>^{1&2}need to order together with main unit, ^{1,2} order either option only</p>

Technical data are subjected to change without notice – File: STR400-F1'F2/F3'F4-LA-XC datasheet 2019V1.0