



STR800 Series – TETRA RF Repeater for 800MHz

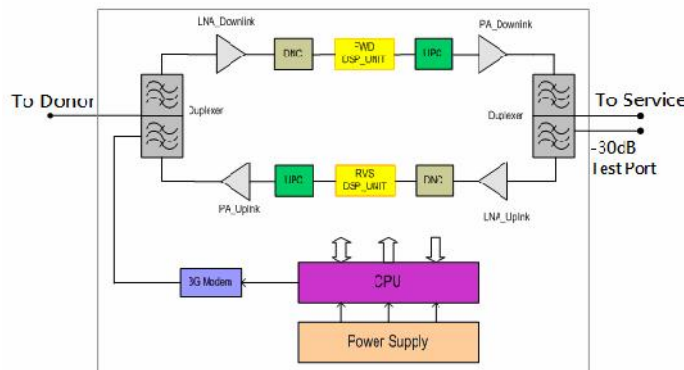
TETRA RF Repeater is used to extend the coverage area for both outdoor and indoor environment by picking up the signal through donor antenna, then amplifier and broadcast to the serving area by serving antenna(s). Sunny STR800 Series – TETRA RF Repeater provides wide range of configurations to address different customer requirements.

Model: STR800-806'825/851'870-RP-28

Highlight

- Comply ETSI standard with CE certificate
- Support up to 80dB Gain
- Remote alarm/control/monitoring/statistics by ethernet, sms, wireless data
- Different kind of options

System Block Diagram



System Outlook

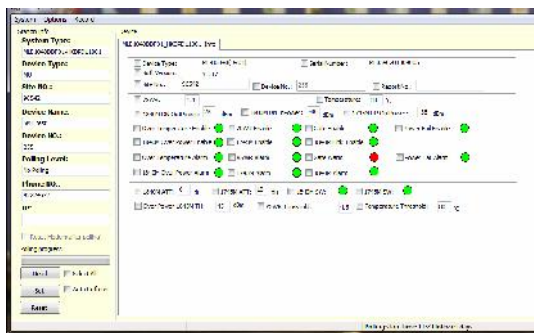


Wall mount

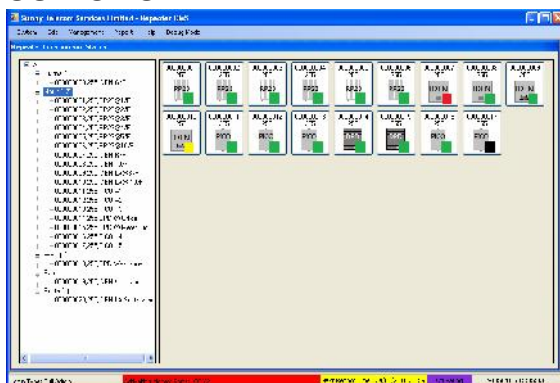


Rack mount

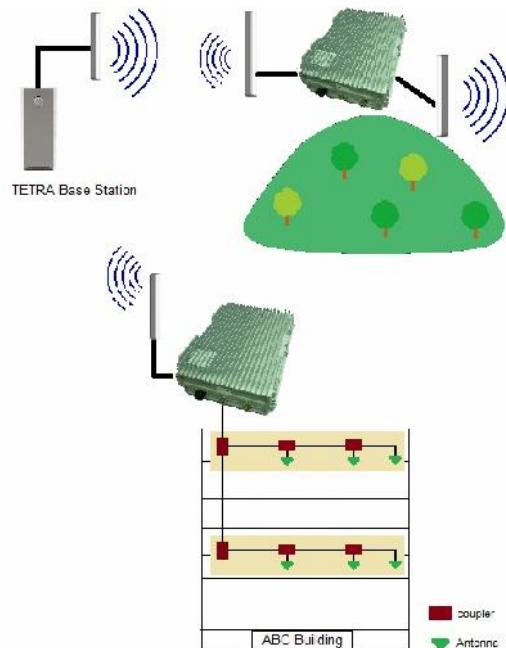
Remote Software



SUN-OMS:



Application Example





Electrical Specification

Items	Uplink	Downlink
Frequency Range	806-825MHz*	851-870MHz*
Output Power	23±2dBm	28±2dBm
Max. Gain	75±3dB	80±3dB
Intermodulation attenuation**	-60dBc@2x20dBm	-60dBc@2x25dBm
Max. Input without damage	-10dBm	-10dBm
Input Sensitivity	-120dBm	-100dBm
ALC	△Po ±1 dBm	
Gain Adjustment Range	30dB@1dB/step	
Time Delay	2us	
Noise Figure	5dB	
VSWR	BS/MS Port	1.5
Compliance	Radio: ETSI TS101 789, EN300 392, EN300 394, EN303 035 EMC: EN301 489, Safety: EN60950, Health: EN 50385	

* The user can pre-select the frequency range from 200kHz to full band during ordering stage

** ≥200kHz between two carriers

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 STR800-DC)
Maximum Power consumption	50W
Cooling	Natural cooling for wall mount, FAN cooling for rack mount
Heat Dissipation	40W 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 STR800-RFM, STR800-WD) Ethernet (option STR800-ETH)
Dimensions	385x285x144mm (wall mount) OR 4U, 19" rack mount, 500mm depth (option: STR800-RACK)
Weight	15kg

*** User predefine simplex or duplex configuration for I/P and O/P ports during ordering stage

Ordering Information:

Model: STR800-806'825/851'870-RP-28	
Options	STR800-RFM: Sunny Remote Control by RF Modem (SMS) ² STR800-WD: Sunny Remote Control by RF Modem (wireless data) ² (Fixed IP needed) STR800-ETH: Sunny Remote Control by Ethernet ² STR800-TP: With Downlink and Uplink -30dB test ports outside the cabinet STR800-RL: With 2 relay input and 2 relay output as external alarm (dry contact) STR800-RACK: Rack mount cabinet with FAN cooling STR800-HSPSU: Sunny Hot Standby Power Supply Unit ¹ STR800-HSRU: Sunny Hot Standby RF Module Unit ¹ STR800-HSWU: Sunny Hot Standby Whole Unit ¹ ^{1&2} need to order together with main unit ^{1,2} order either option only

Technical data are subjected to change without notice – File: STR800-806'825/851'870-RP-28 datasheet 2020V1.0