zenitel

DATASHEET

SLR8000E100W400470

SLR8000 Base Station

Digital Repeater



- 400-470 MHz Frequency Range
- 64 Channel Capacity
- Reliable Operation
- High Sensitivity
- Improved Noise Blocking

Description

The SLR8000 Base Station has a 100 W transmitter output and high sensitivity receiver and delivers radio coverage to an enormous area. With its excellent performance characteristics, it is also ideally suited for congested sites, where tighter specifications are required.

This digital receiver has internal monitoring circuitry, allowing you to measure parameters such as input voltage and current, output power, module temperatures and VSWR. This can be accessed through the front panel maintenance interface, or through a remote management application such as RDAC.

The SLR8000 Base Station has a next-generation receiver design, with high sensitivity and improved noise blocking, so you can be confident of clear voice quality, even in the worst conditions.

The SLR8000 Base Station can be customized to suit your operation.There are options for an internal preselector and antenna relay module, offering you a true one-box installation. You can also opt for an internal wireline card if you need tone control capabilities, 4wire audio and additional external inputs.

Power can be supplied as 110-240 Vac, 12-24 Vdc, or AC with battery fallback: there is even a built-in 5 A battery charger. The 2U unit can be mounted efficiently in a rack, with no requirement for ventilation space above or below. Serviceability is improved by the local voice capability: there is an internal speaker and volume control, with provision for an external microphone.

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Specifications

GENERAL SPECIFICATIONS

Frequency Range	400-470 MHz
Channel Spacing	12.5 / 20 / 25 kHz
Channel Step Size	5 Hz
Frequency Stability	0.5 ppm
Channel Capacity	64
RF Output Power	1-100 W
Dimensions (H x W x D)	89 x 483 x 438 mm
Weight	14.1 kg
Input Voltage (AC)	100-240 Vac, 47-63 Hz
Input Voltage (AC)Current (standby), 110 / 240 V	0.25 / 0.3 A
Input Voltage (AC) Current (transmitting at 100 W), 110 / 240 V	2.0 / 1.1 A (typical)
Input Voltage (DC)	24 V (21.6-32.0 V)
Input Voltage Current(standby),24V	0.5 A
Input Voltage (DC) Current (transmitting at 100 W), 24 V	8.2 A (typical)
Input Power Modes	AC only, DC only, AC with Battery Revert
Operating Temperature Range	-30 to +60 °C (-22 to +140 °F)
Humidity	RH of 95%, Non-condensing at 50 °C
Max Duty Cycle	100%
Digital Vocoder Type	AMBE+2™
Battery Charger	

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Battery Charger Capacity (12 / 24 V)	5 A
Connectivity, front panel	USB B Receptacle, Microphone (RJ45), Speaker (integrated)
Connectivity, rear panel	Tx (N female), Rx (BNC female), USB A Receptacle, 2x Ethernet, DB25 Accessory Connector, External Reference (BNC Female)
External Reference	5/10MHz (Auto-detect)
Audio Types	Input: Balanced (600 ohms and Country-specific Impedances), Unbalanced (1000 ohms), Microphone Accessory Port. Output: Balanced (600 ohms and Country-specific Impedances), Unbalanced (600 ohms), Integrated Speaker
Audio Levels	Input: Balanced: +10 to -30 dBm, Unbalanced: Adjustable, 80 mV rms nominal for 60% RSD. Output: Balanced: +7 to -30 dBm, Unbalanced: Adjustable, 330 mV rms nominal @ 60% RSD.
FCC Emission Designators	11K0F3E, 16K0F3E, 7K60FXD, 7K60F7D, 7K60FXE, 7K60F7E, 7K60F7W
FCC Type Acceptance	ABZ99FT4098
IC Description	109AB-99FT4098

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RECEIVER

Frequency Range	400-470 MHz
Sensitivity, 12dB SINAD	0.3 uV (0.22 uV typical)
Sensitivity, 5% BER	0.25 uV (0.18 uV typical)
Selectivity (TIA603D), 25 / 12.5 kHz	78 / 52 dB
Selectivity (TIA603), 25 / 12.5 kHz	80 / 75 dB
Intermodulation Rejection (TIA603D/ETSI)	85 / 73 dB (87 / 78 dB typical)
Spurious Rejection (TIA603D/ETSI)	85 / 75 dB (95 / 90 dB typical)
Audio Distortion	< 3% (<1.5% typical)
Hum and Noise, 25 / 12.5 kHz	-50 / -45 dB (-56 / -52 dB typical)
Blocking	> 110 dB (113 dB typical)

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TRANSMITTER

Frequency Range	400-470 MHz
RF Output Power	DC (24 V) or AC 1-100 W DC (12 V) 1-50 W
Max Duty Cycle	100%
Intermodulation Attenuation	55 dB
Adjacent Channel Power (TIA603D), 25 / 12.5 kHz	75 / 60 dB
Adjacent Channel Power (ETSI), 25 / 12.5 kHz	75 / 60 dB (78 / 62 dB typical)
Conducted Spurious Emissions	40 dBm < 1 GHz, -30 dBm > 1 GHz
Audio Distortion	< 3% (<1% typical)
Hum and Noise, 25 / 12.5 kHz	-50 / -45 dB (-55 / -52 dB typical)
Rated System Deviation, 25 /12.5 kHz	±5.0 / ±2.5 kHz

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