zenitel

DATASHEET

2620810002

# SLR5500 Digital Analogue Repeater

Digital Repeater



- 400-470mHz
- 64 Channel Capacity
- High Performance
- High Reliability
- Low Power Consumption

## Description

The SLR5500 Digital Analogue Repeater delivers high performance, high reliability two-way radio service with all the features you need to connect your workplace. With its sleek form factor and low power consumption, it’s engineered for low cost of ownership. And with a huge leap forward in technology, it represents the next generation in repeaters.

## SLR5500 Digital Analogue Repeater

Versatile and powerful, the SLR5500 Digital Analogue Repeater combines the best of two-way radio functionality with the latest digital technology. It integrates voice and data seamlessly, offers advanced features that are easy to use and delivers increased capacity to meet your communication needs.

Whether you need the simplicity of a single site conventional system, or the powerful trunking capabilities of Capacity Plus, Linked Capacity Plus or Connect Plus, the SLR5500 Digital Analogue Repeater delivers the power of digital two-way radio to your workforce. It can also operate as an analogue repeater, or as a mixed mode analogue/digital repeater while you transition away from a legacy analogue system.



www.zenitel.com info@zenitel.com

Last revision date: 2023-11-22 12:21

Zenitel and its subsidiaries assume no responsibility for any errors that may appear in this publication, or for damages arising from the information therein. Zenitel products are developed and marketed by Zenitel. The company’s Quality Assurance System is certified to meet the requirements in NS-EN ISO 9001. Zenitel reserves the right to modify designs and alter specifications without notice.

ZENITEL PROPRIETARY. This document and its supplementing elements, contain Zenitel or third party information which is proprietary and confidential. Any disclosure, copying, distribution or use is prohibited, if not otherwise explicitly agreed in writing with Zenitel. Any authorized reproduction, in part or in whole, must include this legend; Zenitel – All rights reserved.

# Specifications

**GENERAL SPECIFICATIONS**

| | |
|---|---|
| Frequency Range | 400-470 MHz |
| Channel Capacity | 64 |
| RF Output Power | 1-50 W |
| Dimensions (H x W x D) | 44 x 483 x 370 mm |
| Weight | 8.6 kg |
| Input Voltage (AC) | 100-240 Vac, 47-63 Hz |
| Input Voltage Current (standby), 110 / 240 V | 0.18 / 0.25 A |
| Input Voltage Current (transmitting), 110 / 240 V | 1.5 / 0.9 A |
| Input Voltage (DC) | 11.0-14.4 Vdc |
| Input Voltage Current (standby) | 0.7 A |
| Input Voltage Current (transmitting) | 9.5A |
| Humidity | RH of 95%, non-condensing at 50 °C (122 °F) |
| Max Duty Cycle | 100% |
| FCC Description | ABZ99FT4096 |
| IC Description | 109AB-99FT4096 |
| Digital Vocoder Type | AMBE+2™ |
| Battery Charger Capacity | 12 V, 3 A |
| Connectivity | Tx (N female), Rx (BNC female), USB A receptacle, 2x Ethernet |
| Supported System Types | Digital Conventional, IP Site Connect, Capacity Plus, Linked Capacity Plus, Connect Plus Analogue Conventional, MPT 1327 |
| Operating Temperature Range | -30 to +60 °C (-22 to +140 °F) |





Zenitel and its subsidiaries assume no responsibility for any errors that may appear in this publication, or for damages arising from the information therein. Zenitel products are developed and marketed by Zenitel. The company's Quality Assurance System is certified to meet the requirements in NS-EN ISO 9001. Zenitel reserves the right to modify designs and alter specifications without notice.

ZENITEL PROPRIETARY. This document and its supplementing elements, contain Zenitel or third party information which is proprietary and confidential. Any disclosure, copying, distribution or use is prohibited, if not otherwise explicitly agreed in writing with Zenitel. Any authorized reproduction, in part or in whole, must include this legend; Zenitel – All rights reserved.

**RECEIVER**

| | |
|---|---|
| Frequency Range | 400-470 MHz |
| Channel Spacing | 12.5 / 20 / 25 kHz |
| Frequency Stability | 0.5 ppm |
| Sensitivity, 12dB SINAD | 0.22 uV |
| Sensitivity, 5% BER | 0.22 uV |
| Selectivity (TIA603D), 12.5/20/25 kHz | 55 / 80 / 80 dB |
| Selectivity (TIA603), 12.5/20/25 kHz | 68 / 80 / 80 dB |
| Intermodulation Rejection (TIA603D/ETSI) | 82 / 73 dB |
| Spurious Rejection (TIA603D/ETSI) | 95 / 90 dB |
| Audio Distortion | < 1% |
| Transmitter Hum and Noise, 12.5/20/25 kHz | -50 / -45 / -45 dB |



www.zenitel.com info@zenitel.com Last revision date: 2023-11-22 12:21

Zenitel and its subsidiaries assume no responsibility for any errors that may appear in this publication, or for damages arising from the information therein. Zenitel products are developed and marketed by Zenitel. The company's Quality Assurance System is certified to meet the requirements in NS-EN ISO 9001. Zenitel reserves the right to modify designs and alter specifications without notice.

ZENITEL PROPRIETARY. This document and its supplementing elements, contain Zenitel or third party information which is proprietary and confidential. Any disclosure, copying, distribution or use is prohibited, if not otherwise explicitly agreed in writing with Zenitel. Any authorized reproduction, in part or in whole, must include this legend; Zenitel – All rights reserved.

**TRANSMITTER**

| | |
|---|---|
| Frequency Range | 400-470 MHz |
| RF Output Power | 1-50 W |
| Max Duty Cycle | 100% |
| Channel Spacing | 12.5 / 20 / 25 kHz |
| Frequency Stability | 0.5 ppm |
| Intermodulation Attenuation | 40 dB |
| Adjacent Channel Power (TIA603D), 12.5/20/25 kHz | 62 / 78 / 78 dB |
| Adjacent Channel Power (ETSI), 12.5/20/25 kHz | 78 / 62 dB |
| Conducted Spurious Emissions | -36 dBm < 1 GHz, -30 dBm > 1 GHz |
| Modulation Fidelity (4FSK) | FSK Error 5%, FSK Magnitude 1% |
| Audio Response | TIA603D |
| Audio Distortion | < 1% |
| Receiver Hum and Noise, 12.5/20/25 kHz | -45 / -50 dB |
| Rated System Deviation, 12.5/20/25 kHz | ±5.0 / ±2.5 kHz |



www.zenitel.com info@zenitel.com Last revision date: 2023-11-22 12:21

Zenitel and its subsidiaries assume no responsibility for any errors that may appear in this publication, or for damages arising from the information therein. Zenitel products are developed and marketed by Zenitel. The company's Quality Assurance System is certified to meet the requirements in NS-EN ISO 9001. Zenitel reserves the right to modify designs and alter specifications without notice.

ZENITEL PROPRIETARY. This document and its supplementing elements, contain Zenitel or third party information which is proprietary and confidential. Any disclosure, copying, distribution or use is prohibited, if not otherwise explicitly agreed in writing with Zenitel. Any authorized reproduction, in part or in whole, must include this legend; Zenitel – All rights reserved.