

TETRA CHANNEL SELECTIVE REPEATER CSG 9380-BDA85-37X

The TETRA BDA / Repeater is designed to provide a more cost-effective solution than adding a new Base Transceiver Station (BTS) to improve signal coverage and communication quality in Radio Communication systems.

The repeater works as a relay between the BTS and mobiles / handhelds. It receives low power signal from BTS via the Donor Antenna, linearly amplifies the signal and then retransmits it via the Service Antennas to the weak / blind coverage area. In the return path the mobile signal is also amplified and retransmitted to the BTS via the opposite direction.

The Channel selective function can amplify signals selected by channel selector in the customized band.



Features

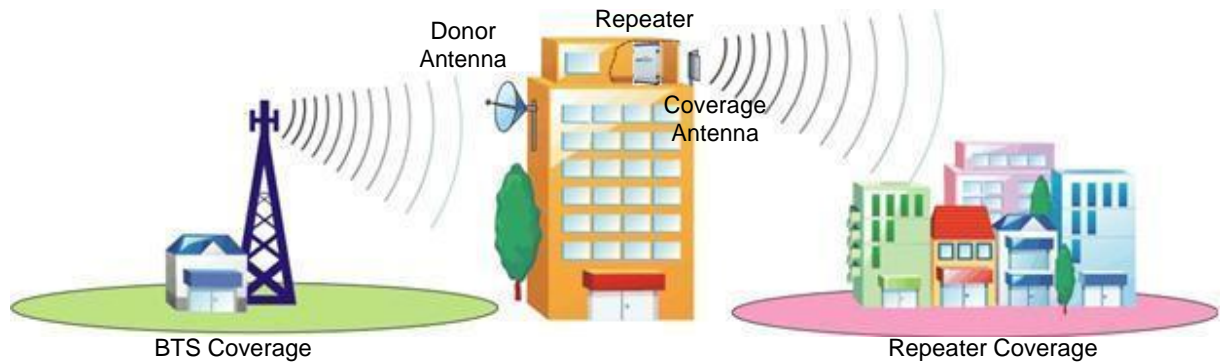
- Aluminum cabinet with IP65 protection has high resistance to dust, water and corroding
- No interference to BTS by adopting linear amplifier with high gain and low noise
- Adopting filter and channel selector with highly selectivity and low insertion loss eliminates interference between uplink and downlink
- USB port provides a link to a notebook for local supervision or to the built-in wireless modem to communicate with the NMS (Network Management System) that can remotely supervise repeater's working status and download operational parameters to the repeater

Applications

To expand signal coverage or enhance signal blind area where TETRA signal is weak or unavailable.

- Public Safety
- Transportation
- Utilities
- Government
- Military
- PAMR
- Hotels, Universities and Industries
- Oil & Gas

Application Diagram



Technical Specifications

| Parameters | | Specifications | |
|---|------------------------|------------------|------------------|
| Frequency Range(Customized) | Uplink | | Downlink |
| | 385 ~ 390 MHz | | 395 ~ 400 MHz |
| Maximum Output Power(Customized) | 30 / 33 dBm | | 37 / 40 / 43 dBm |
| Maximum Gain | 85 dB | | 85 dB |
| Channel No.(SAW filter for DL) (Customized) | 2/4/6/8 | | |
| In-band flatness | ≤3dB | | |
| Auto Level Control (ALC) | ≤2dB | | |
| Noise Figure | ≤ 5dB | | |
| Gain Adjustment Range | 1~31 dB @ step of 1 dB | | |
| VSWR | ≤1.5 | | |
| Phase P-P error | ≤20 | | |
| RMS phase error | ≤5 | | |
| System Delay | ≤5.0 us | | |
| Spurious Emission | In-Band | ≤-22dBm/30KHz | |
| | Out-Band | 9KHz-1GHz | ≤-36dBm/30KHz |
| | | 1GHz | ≤-30dBm/30KHz |
| Third-order Inter-Modulation | In-Band | ≤ -45dBc / 30kHz | ≤ -40dBc / 30kHz |
| Output/input resistance | 50 Ω | | |
| | RF Connector | N-Type (Female) | |
| Working temperature | -25°C ~+55°C | | |
| Relative humidity | 5~95% RH | | |
| Power Supply (customized) | AC220V,50Hz | | |
| Dimensions | 640mm X 400mm X 230mm | | |

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|---|--|
| Weight | 35kg |
| Backup Power Supply (optional) | 4 hours |
| Application | Indoor or Outdoor (IP65) |
| NMS Monitoring Parameters (optional) | UL/DL Power, UL/DL Max Gain, RSSI, ATT, Channel No, UL/DL Output ALC, Power alarm Threshold, UL/DL PA Temperature etc |
| NMS Controlled Parameters (optional) | Channel No., ATT, Output Power Thresholds UL/DL, UL/DL Output ALC , PA Switch ,Alarm Report can be enable /disable etc |