

## LTE1800+UMTS/LTE2100 15dBm Dual Band RF Repeater

**Model: TS-C15E-DW**

The RF 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 system. And its easy installation and maintenance can help carrier get fast return.

The repeater is working as a relay between the BTS and mobiles. It receives the low-power signal from BTS via the Donor Antenna, linearly amplifies the signal and then retransmits it via the Coverage Antenna to the weak/blind coverage area. And the mobile signal is also amplified and retransmitted to the BTS via the opposite direction.



### Features

- Aluminum-alloy casing with IP65 protection has high resistance to dust, water and corrosion
- Low interference to BTS by adopting linear amplifier with high gain and low noise
- Built-in TDD-LTE baseband synchronization module, automatic completion of TDD-LTE wireless network cell search and wireless signaling processing
- RJ45 port provides a link to a notebook for local supervision or IP Based NMS (Network Management System) that can remotely supervise Repeaters working status and download operational parameters to the Repeater Via Ethernet or LAN

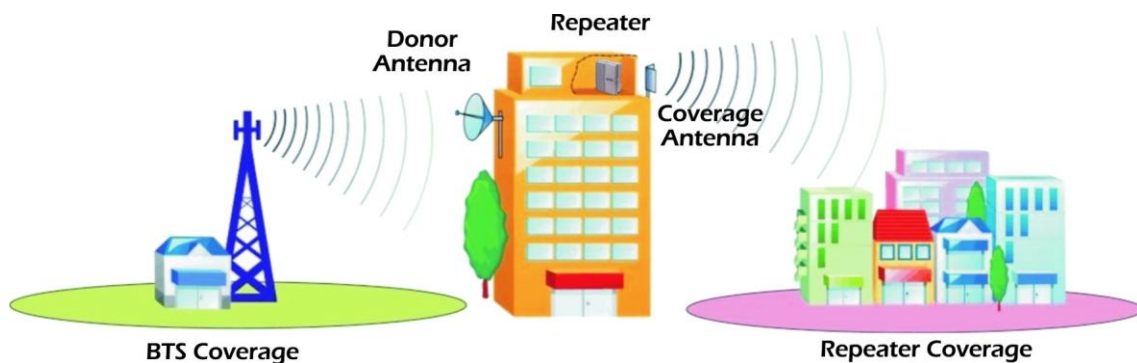
### Applications

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

Outdoor: Airports, tourism regions, golf courses, tunnels, factories, mining districts, villages, ...

Indoor: Hotels, exhibition centers, basements, shopping malls, offices, parking lots, ...

### Application Diagram



## Technical Specifications

| Items                                       |                 | Specifications                         |
|---|-----------------|--|
| <b>System</b>                               |                 | LTE1800+UMTS/LTE2100 (FDD)             |
| <b>Frequency Range</b>                      | <b>Uplink</b>   | 1710~1785 /1920~1980MHz                |
|   | <b>Downlink</b> | 1805~1880 / 2110~2170MHz               |
| <b>Working Bandwidth</b>                    |                 | 75/60MHz                               |
| <b>Maximum Output Power</b>                 | <b>Uplink</b>   | 12dBm                                  |
|   | <b>Downlink</b> | 15dBm                                  |
| <b>Maximum Gain</b>                         |                 | 60(UL)65(DL)dB                         |
| <b>Gain Adjustable Range</b>                |                 | 0~30dB/1dB Step                        |
| <b>VSWR</b>                                 |                 | ≤1.5                                   |
| <b>In Band Ripple</b>                       |                 | ≤±3dB                                  |
| <b>Spurious Emission</b>                    |                 | 9kHz~1GHz: ≤ -36dBm                    |
|   |                 | 1GHz~12.75GHz: ≤ -30dBm                |
| <b>EVM</b>                                  |                 | ≤ 4.5%                                 |
| <b>Noise Figure</b>                         |                 | ≤ 6dB                                  |
| <b>Maximum Input Power(Non-Destructive)</b> |                 | 0dBm                                   |
| <b>Group Delay</b>                          |                 | ≤ 1μs                                  |
| <b>I/O Impedance</b>                        |                 | 50Ω                                    |
| <b>RF Connector</b>                         |                 | N Female(One BTS Port, One MS Port)    |
| <b>Operation Temperature Range</b>          |                 | -25°C ~ + 55°C                         |
| <b>Relative Humidity Range</b>              |                 | ≤ 95% (Non Condensing)                 |
| <b>Power Supply</b>                         |                 | AC 110~220V, (50/60Hz),Output DC 5V/3A |
| <b>Application</b>                          |                 | Indoor                                 |
| <b>Dimensions</b>                           |                 | 225*160*30mm                           |
| <b>Weight</b>                               |                 | ≤1kg                                   |