

## LTE2100 ICS Repeater

*Model: TSLA30S1-3*

The ICS 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 Mobile system. And its easy installation and maintenance can help carriers 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

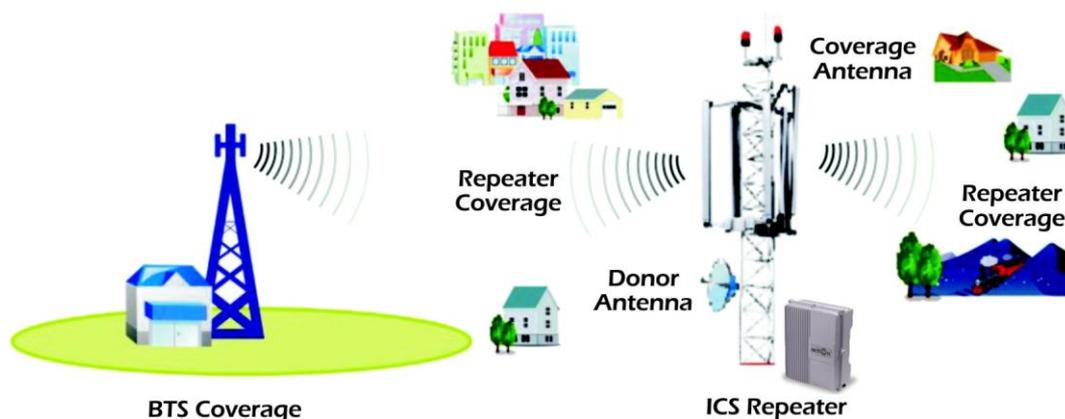
- Aluminum-alloy casing with IP65 protection has high resistance to dust, water and corrosion
- Real Time Interference Signal Cancellation (Multi-path Fading, Feed-Back signal)
- Adopting filter with highly selectivity and low insertion loss eliminates interference between uplink and downlink
- RJ45 port provides a link to a notebook for local supervision or IP Based NMS (Network Management System) that can remotely supervise repeater's working status and download operational parameters to the repeater via Ethernet or LAN

### Applications

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

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

### Application Diagram



## Technical Specifications

Items		Specifications
<b>System</b>		LTE2100
<b>Frequency Range</b>	<b>Uplink</b>	1940-1960 MHz
	<b>Downlink</b>	2130-2150 MHz
<b>Number of Channels</b>		1(20MHz per Channel)
<b>Composite RF</b>	<b>Uplink</b>	27±2dBm
<b>Output Power</b>	<b>Downlink</b>	30±2dBm
<b>Maximum Gain</b>		90±3dB
<b>Gain Adjustment Range</b>		1-31dB @ Step of 1dB
<b>VSWR</b>		≤ 1.5
<b>In-Band Ripple</b>		≤±2dB
<b>Group Delay</b>		≤ 5us
<b>Interference Signal Cancellation Capacity</b>		≥30dB(Antenna Isolation +15dB)
<b>Interference Signal Detecting Range (Direct &amp; Multi-path Feedback)</b>		≤ 7.0μs
<b>Maximum Input Power (Non-Destructive)</b>		-10dBm
<b>Spurious Emission</b>		9kHz~1GHz: ≤ -36dBm
		1GHz~12.75GHz: ≤ -30dBm
<b>EVM</b>		≤ 8%
<b>Noise Figure</b>		≤ 5dB
<b>I/O Impedance</b>		50Ω
<b>RF Connector</b>		N-Female
<b>Temperature Range</b>		Operation: -20°C ~ + 55°C
<b>Relative Humidity Range</b>		≤ 95% (Non Condensing)
<b>Application</b>		Indoor or Outdoor(IP65)
<b>Dimensions</b>		428mm X 328mm X 175mm
<b>Weight</b>		≤ 15Kg
<b>LED Indicator</b>		Power Supply,Alarm,Running
<b>Power Supply</b>		DC24(Solar Panel)
<b>Power Consumption</b>		≤ 100W
<b>Local Control</b>	Web Browser GUI Local Via RJ-45 Interface or WiFi Hotspot	



**Tone Spread**  
Solutions for Wireless Signal

**Remote Mode(Optional)**

Wireless Modem(3G/4G), IP Connectivity

**NMS Function(Optional)**

Real-time Alarm for Door Status, Temperature, Power Supply,VSWR,etc;

Remote Control such as Turn On/Off, Increasing/Decreasing Output Power, etc;

Real-time Status for UL/DL Gain, Input/Output Power, All Status of Repeater etc;