### **Digital Pico RF Repeater\_Quad-Band**





#### LTE700+LTE900+LTE1800+LTE2100

The Digital Pico Repeater provides an affordable solution to solve the indoor signal coverage problems due to signal fading and attenuation caused by architecture obstacles. 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 picks up the strongest signal from BTS via the Donor Antenna, linearly amplifies the signal and then retransmits it via the Indoor Signal Distribution System to the weak/blind coverage area. And the mobile signal is also amplified and retransmitted to the BTS via the opposite direction.

## **Key features**

- Two signal ports with full duplex design.
- Linear power amplification to effectively suppress inter-modulation and spurious emission.
- > Stable and improved signal transmission quality.
- Smart Automatic Level Control (ALC) ensures output level stable and adjustable continuously.
- Auto Isolation check between service and donor antennas.
- > Smart mode to auto-adjust gain according to the isolation and signal level received by donor site.
- Simple installation with external AC/DC adapter

## **Advantages**



- **☑** Remote control
- **☑** Digital features:

Balancing operator level (Option)

**☑** Low consumption



E-mail: sales@tspd.com.tw

# **Specifications**

### **Technical characteristics**

| Items System                         |                    | Specifications   |  |   |   |
|--------------------------------------|--------------------|--|--|---|---|
|                                      |                    | LTE700   | UMTS/LTE900  | LTE1800   | UMTS/LTE2100  |
| Frequency Range                      | Uplink             | 703~748MHz   | 885~915MHz   | 1710~1775MHz  | 1920~1980MHz  |
|                                      | Downlink           | 758~803MHz   | 930~960MHz   | 1805~1870MHz  | 2110~2170MHz  |
| Working Frequency<br>(MHz) (Default) | Uplink<br>Downlink | 703~713/713~723<br>723~728/728~748<br>758~768/768~778<br>778~783/783~803             | 885~895/895~905<br>905~915<br>930~940/940~950<br>950~960                             | 1710~1725/1725~1735<br>1735~1755/1755~1775<br>1805~1820/1820~1830/<br>1830~1850/1850~1870         | 1920~1935/1935~1940/<br>1940~1960/1960~1980<br>2110~2125/2125~2130/<br>2130~2150/2150~2170        |
| Bandwidth(Digital Filter)            |                    | 4 Sub-bands, BW Can be Adjusted per Sub-band by Firmware Upgrading of Digital Module | 3 Sub-bands, BW Can be Adjusted per Sub-band by Firmware Upgrading of Digital Module | 4 Sub-bands, BW Can<br>be Adjusted per Sub-<br>band by Firmware<br>Upgrading of Digital<br>Module | 4 Sub-bands, BW Can<br>be Adjusted per Sub-<br>band by Firmware<br>Upgrading of Digital<br>Module |
| Maximum Gain                         | Uplink             | 60±3dB per Band  |  |   |   |
|                                      | Downlink           | 60±3dB per Band  |  |   |   |
| Maximum Output<br>Power              | Uplink             | 20±2dBm per Band   |  |   |   |
|                                      | Downlink           | 20±2dBm per Band   |  |   |   |
| Manual Gain Control Range            |                    | ≥20dB(The Gain of Each Sub-band can be Adjusted Separately)                          |  |   |   |
| AGC Range                            |                    | ≥20dB  |  |   |   |
| Maximum Input power                  |                    | ≤-10dBm(Non-Destructive)   |  |   |   |
| VSWR                                 |                    | ⊴2   |  |   |   |
| Group Delay Time                     |                    | ≤ 8μs  |  |   |   |
| I/O Impedance                        |                    | 50 Ω   |  |   |   |
| Noise Figure                         |                    | ≤8dB   |  |   |   |
| Spurious Emission                    |                    | 9kHz~1GHz: ≤ -36dBm  |  |   |   |
|                                      |                    | 1GHz~12.75GHz:≤-30dBm  |  |   |   |
| RF Connector                         |                    | 5 X N-Female(1PCS BS Port and 4 PCS MS Ports)  |  |   |   |
| Power Consumption                    |                    | ≤100W  |  |   |   |
| Power Supply                         |                    | Input:AC100~ 240V  |  |   |   |
| Dimensions                           |                    | 361*265*113mm  |  |   |   |
| Weight                               |                    | ≤12 kg   |  |   |   |
| Alarm Monitoring System              |                    | Alarm for Uplink Self-Oscillation  |  |   |   |
| Isolation Detection                  |                    | Isolation Check During Boot Time   |  |   |   |
| LED Indicator                        |                    | Power Supply, Alarm, State   |  |   |   |
| Operating Temperature                |                    | -10 ~ +50 °C   |  |   |   |
| Application                          |                    | Indoor(IP30)   |  |   |   |

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| Relative Humidity Range | ≤95%(Non condensing) |  |  |
|-------------------------|----------------------|--|--|
| Mounting Type           | Wall Mounting        |  |  |

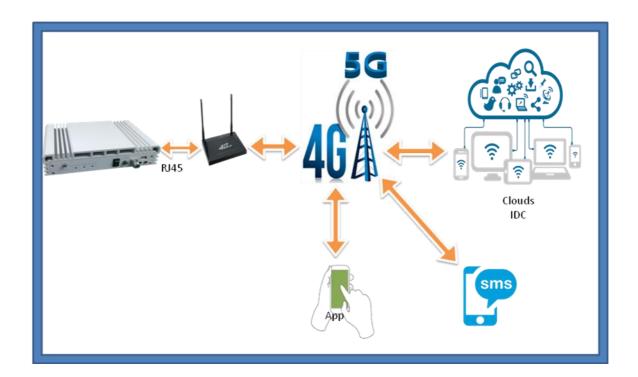
**Local Monitoring Interface** 

USB

**Remote Monitoring** 

Cloud NMS via RJ45 Port

## **Network Management System (NMS)**



# **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, ...

