

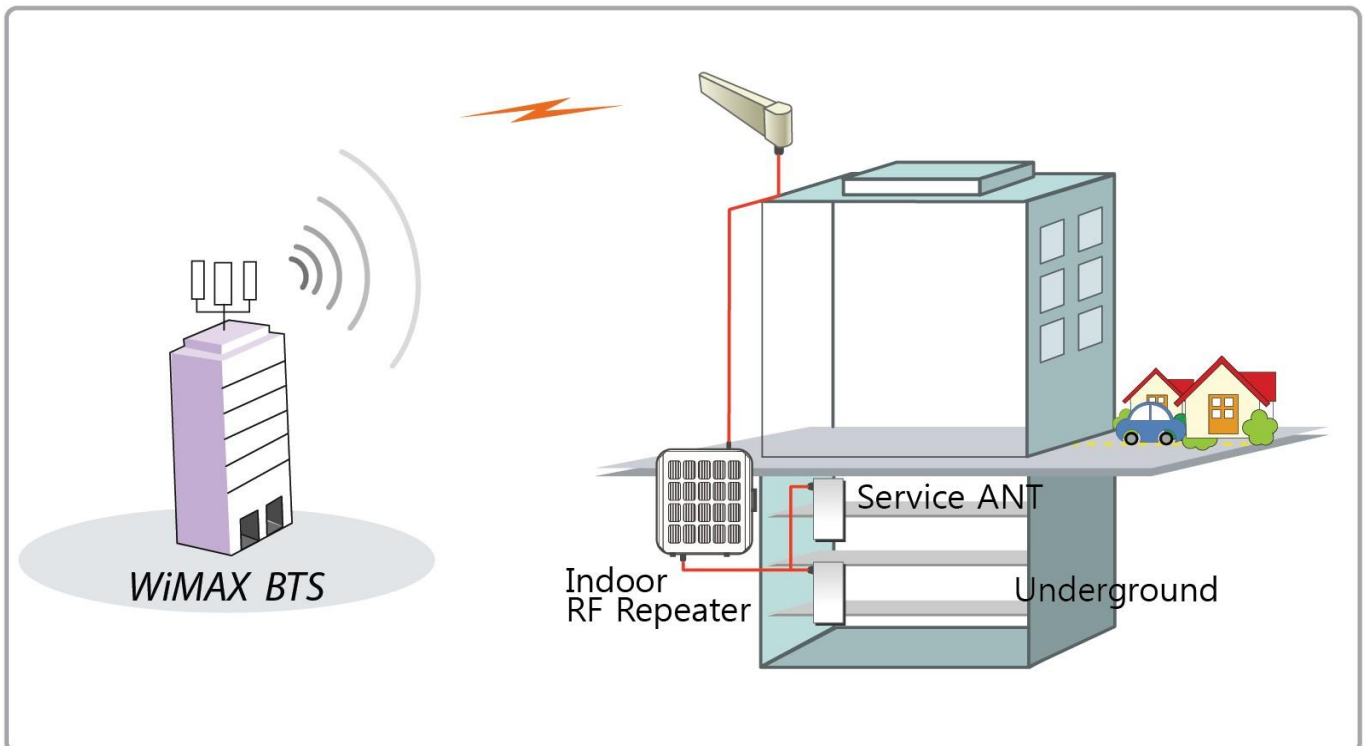
WiMAX Indoor RF Repeater

Model GSR-2630D-SPR Sprint BRS Band Operation



WiMAX Indoor RF Repeater

- Mobile WiMAX Service
 - Cell Search by FA change
 - TDD Synchronization by Preamble Detection
 - DL/UL Ratio Extraction by DATA Rate Change Extraction
 - TDD Switching Using SPDT
- Field Adjustable Band Selection
 - Selectable AB, BC, CD, EF, FH, or HG Bands
- Automatic Setup and Operational Gain Control
 - Auto Oscillation Check by Feedback Path Detection
- Small and lightweight, mounts virtually anywhere
- Low power consumption, powered from any 110 AC outlet
- Remote Monitoring Option
- Applications – Max.3.0 Acre coverage
 - Small stores and businesses
 - Manufacturing facilities
 - Warehouses



WiMAX Indoor RF Repeater Service Organization

System Specifications (Down Link)

Item	Specification	Remark
Frequency	2496MHz ~ 2690 MHz	BW: 194MHz
Channel Select	30MHz	AB, BC, CD, EF, FH, HG
MAX GAIN	80 dB ± 1.5 dB	90dB optional gain setting
RIPPLE	≤ +/- 1.5dB	30MHz contiguous bandwidth
Propagation Delay	≤ 5us	
VSWR	≤ 1.5: 1	
Roll Offs	≥ 40dBc @ 1MHz ≤ Zero Gain @ 3.5MHz	
Input Range	- 50dBm ~ -20dBm	
Output Power	30dBm ± 1 dB / Total	
Out of Band Emissions	Less than -37dBm @ 2495MHz and below -13dBm @ ±50KHz (100KHz BW) -13dBm @ ±1.5MHz (1MHz BW) -37dBm @ ±3.5MHz, ≤ ±6MHz (1MHz BW)	WiMAX Source -37dBm @ ±3.5MHz, ≤ ±6MHz (External Filter Connection)
AGC Range	0 ~ 30dB	
Att Accuracy / Control Step	± 0.5 dB / 1dB	
AGC Accuracy	≤ ± 2dB	WiMAX Source
EVM	≤ 5 % (the spec. against the source signal)	WiMAX Source
Frequency Stability	≤ 0.02 ppm	CW Source
Noise Figure	5dB @ Max Gain	
RSSI Accuracy	≤ ± 2dB	WiMAX Source
Output Power Accuracy	≤ ± 2dB	WiMAX Source

System Specifications (Up Link)

Item	Specification	Remark
Frequency	2496MHz ~ 2690 MHz	BW: 194MHz
Channel Select	30MHz	AB, BC, CD, EF, FH, HG
Max Gain	80 dB ± 1.5 dB	90dB optional gain setting
Ripple	≤ +/- 1.5dB	30MHz contiguous bandwidth
Propagation Delay	≤ 5us	
VSWR	≤ 1.5: 1	
Roll Offs	≥ 40dBc @ 1MHz ≤ Zero Gain @ 3.5MHz	
Input Range	- 50dBm ~ -20dBm	
Output Power	30dBm ± 1 dB / Total	
ALC Range	0 ~ 30dB	
Att Accuracy / Control Step	± 0.5 dB / 1dB	
ALC Accuracy	≤ ± 2dB	CW Source
Gain Balance	Engage the Downlink ATT	
Frequency Stability	≤ 0.02 ppm	CW Source
Noise Figure	5dB @ Max Gain	
Output Power Accuracy	≤ ± 2dB	WiMAX Source

System Specifications (Addition Specifications)

Item	Specification	Remark
Switching Adjustment Range	TTG : 0 ~ 105us, RTG : 0 ~ 60us, Guard Offset : 0 ~ 30us	TTG: 105.71us RTG: 60us
Switching Timing Adjustment Accuracy / Control Step	≤ ±1us / 1us	TTG , RTG , Guard Offset
RSSI Alarm Range	-85dBm ~ -58dBm	Alarm (DL)
Over Power Alarm	± 34dBm ± 2dB (U/L)	Alarm , Shutdown (DL / UL)
VSWR Alarm	Port Open case (@ Max Output Power)	Alarm , Shutdown (DL / UL)
High Temp Alarm	≥ 176°F	Alarm , Shutdown
DC Alarm	≤ 70% (DC Voltage)	Alarm , Shutdown
Impedance	50 ohm	
Remote Access & Control	External Modem Box available	

Item	Specification	Remark
RF Connector	N-Type Female	
Power Connector	AC	MIL-C-5015 Type 206708-1 (plug)
	DC	
AC Supply	110VAC ~ 125VAC, 60Hz	6.0 AMPS
DC Supply	-40VDC ~ -60VDC, & 20VDC ~ 30VDC	Optional
Out Dimension	13.77" X 15.74" X 10"	Inches
Net Weight	50	Pounds
Material	Module	AL6063S-T5
	Cabinet	AL5052P
Operation Temperature	14°F ~ 122°F	Convection cooling
Humidity	5% ~ 95%	Non-condensing
Dust Resistance	TELCORDIA GR63-CORE	
Vibration Resistance	1G, 10~150Hz, 0.1 Octaves/min	