

D-SBR 3307

DIGITAL CHANNEL SELECTIVE SINGLE BAND REPEATER FOR LTE - 700MHZ

- ETSI TS 36.106 V9.0.0 compliant
- MCPA technology providing 33dBm DL Power, 82dB Gain
- A single unit to support 700 MHz lower and upper bands simultaneously
- Supports up to 12 LTE sub-bands with optional non-contiguous sub-bands enabled by programmable innovative DSP filtering
- Top level EVM, ACRR and emission performance support latest LTE technologies
- SmartALC™ technology
 - Prevents oscillations and balances coverage
 - Automatically sets optimum gain
 - Ensures transparent network operation
- Individual Gain and ALC setting for each sub-band for single and multi operator applications



D-SBR 3307 (Digital Single band repeater) is specifically designed for inbuilding LTE applications. It supports up to 12 LTE bandwidth (1.4, 3, 5, 10, 15, 20 MHz) channels with optional non-contiguous LTE sub-bands and can meet the needs of any future LTE channel allocation.

D-SBR 3307 fully meets 3GPP LTE standard requirements. Highly linear components and unparalleled innovative DSP filtering provide top level performance that supports high throughput of the latest LTE technology.

D-SBR 3307 utilizes Axell Wireless proprietary SmartALC power control algorithm. This algorithm provides

more than gain control: it automatically optimizes the gain setting by learning the actual range of RSSI levels over a user-specified period of time and determines when the isolation is becoming a limiting factor for the performance of the system.

The SmartALC, together with the low noise figure of the Repeater, minimize noise rise at the donor cell site. SmartALC allows the installer to quickly set up the unit yet achieve the design goals specified by the system engineer. Using an advanced ALC mechanism each one of the sub-bands has an individual gain and ALC setting, hence it is possible to support multi operator

applications with a single unit.

D-SBR 3307 features panel LEDs. These provide ongoing status and alarm indication and can also be used during setup as an RSSI level indicator to help align the donor antenna to the donor sector.

The efficient thermal characteristics of the D-SBR 3307, careful component selection and robust design result in high system reliability.

D-SBR 3307 supports Intuitive Web management GUI that can be accessed using any standard browser (no client installation required) through a local or remote (via external modem) connection.



AXELL WIRELESS CARRIER SOLUTIONS

Axell Wireless offers a comprehensive portfolio of enhanced coverage solutions for the wireless carrier market. Based on IF-SAW filtering, patented DSP filtering™ and SmartALC™ technologies, Axell Wireless' proven, indoor and outdoor solutions solve a wide range of network issues including interference and oscillation problems, challenging coverage holes, inadequate in-building coverage and cell extension from the smallest structures to the largest venues.

Regardless of the technology or frequency, Axell Wireless can provide customized coverage solutions that address any combination of unique and complex network needs for the wireless carrier.



The D-SBR 3307 digital repeater is powerful enough to drive a passive Distributed Antenna system (DAS) for coverage areas over 100,000 ft² (10,000m²) in buildings, parking lots, malls, warehouses and offices.

SPECIFICATIONS

PARAMETERS		DOWNLINK	UPLINK
ELECTRICAL			
Frequency	Lower band	728 - 746 MHz	698 - 716 MHz
	Upper band	746 - 757 MHz	776 - 787 MHz
Passband Gain		82dB	82dB
Passband Ripple		± 2.5dB	± 2.5dB
Gain Attenuation Range		0 - 25 dB (in 1 dB steps)	0 - 25 dB (in 1 dB steps)
Composite Output Power		+ 33 dBm	+ 27 dBm
Noise Figure @ Maximum Gain (typical)		5 dB	4 dB
Propagation Delay		< 6 µsec	< 6 µsec
Number of filters (*)		1 to 12 or 1 to 8, each filter can be set to 1.4, 3, 5, 10, 15, 20 MHz across the whole band	
Conformance Standard		3GPP TS 36.106 version 9.0.0	
ENVIRONMENTAL			
Power Supply		110 to 240 VAC, max 160 W	
Total RF Input Power		+ 10 dBm	
Impedance Level		50 Ohm	
RF Connector		N-type Female	
VSWR		1.5:1	
Operating Temperature		14 to 122° F (-10 to +50° C)	
Dimensions W x H x D		12" x 14.76" x 8" (305 x 375 x 205 mm)	
Weight		28.8 lbs (13 kg)	
Weatherproof		IP-65	

(*) Support BW option up to 20 MHz by setting the start-stop frequency

All parameters are typical at +77° F (+25°)

SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE

ORDERING INFORMATION		
IDENTIFICATION	DESCRIPTION PART	NUMBER
D-SBR 700	Digital filtering channel selective repeater 33dBm, 82dB for 700MHz LTE band, 8 sub-bands	D-SBR 3307
D-SBR 700	Digital filtering channel selective repeater 33dBm, 82dB for 700MHz LTE band, 12 sub-bands	D-SBR 3307-12

About Axell Wireless

Axell Wireless is one of the top 3 global providers of wireless coverage solutions and the market leader in the provision of solutions for the public safety market worldwide. Applications for Axell Wireless equipment include coverage solutions for all sorts of environments including road and rail tunnels, metros, small and large buildings and transportation systems such as railways and aeroplanes. With its headquarters in the UK, Axell Wireless has been operating for over 30 years and has a substantial international presence operating out of 10 offices across 4 continents. A proven track record combined with a worldwide reputation for providing innovative and high quality products have made Axell Wireless a truly global player in the wireless coverage industry.

www.axellwireless.com