



## Your Choice for Residential LTE 1800 Coverage. Signal AT hOME.

The AT-1800 Band Selective Repeater is Coiler's unique offering for a rapid mobile coverage extension on LTE 1800 networks. The Atom has been designed especially to help carriers solve the coverage problems and enable high data transmission rates in a variety of smaller indoor environments such as homes and offices.

The Atom combines an integrated service antenna as well as an additional antenna extension port to enable a convenient and flexible system extension and a plug and-play like installation. The unit can be deployed even by the most non-technical user, making it perfect for operators seeking a smart, yet economic solution to satisfy growing demands for indoor coverage and fast data transmission from their customers while, at the same time, increasing their own revenues.

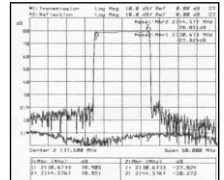
## Key Features and Benefits

### Instant System Extension

Combines a gain of 55dB for GSM (2G) and 65dB for LTE (4G). UL/DL output power of +10dBm for GSM (2G) and +13dBm for LTE (4G) to effectively cover a variety of smaller indoor areas.

### Customizable Bandwidth

With two types of AT-1800 and selectable bandwidth of 10, 15, or 20MHz, AT-1800 can boost RF signal anywhere along the 75MHz range and ensures that only the operator's frequency is amplified. High SAW filter selectivity provides sharp out of band gain rejection.



### Complete Network Safety

Functions such as Auto Isolation Detection (AID), Auto Shutdown (ASD) and Auto Turn-on (ATO) ensure that the repeater is optimally positioned and safe guarded at all times. Automatic Gain Control (AGC) function protects the network from oscillation and interference. Ensures that spikes in output power will not damage the system or interfere with base stations.

### Built-In Antenna and Antenna Extension Port

Provides an embedded service antenna as well as an additional service antenna port to enable an easy and flexible system extension.

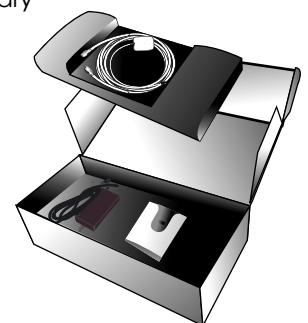


### Integrated Keypad and Digital Display

For easy DIY installation, the Atom displays Donor Level Signal Indication (RSSI) and low signal alarm indication. For user convenience, also provides access to manual gain attenuation which allows for a flexible adoption to various mobile environments.

### Complete "Ready to Install" Package

Comes with everything necessary for a simple, plug-and-play installation. Combines an embedded service antenna with a stylish and compact design that will compliment the decor of any home or office.



	900	1800	2100
Soho	AT-900 13dBm 55dB/65dB	AT-1800 13dBm 55dB/65dB	AT-2200 13dBm/7dBm 65dB PS-2200 13dBm/10dBm 70dB
Pico	VB-900 18dBm 70dB	VB-1800 18dBm 70dB	VB-2200 18dBm 70dB
Mini	BR-900 20dBm 80dB	BR-1800 20dBm 80dB	BR-2200 20dBm 80dB
Micro	CR-900 30dBm/33dBm 90dB		CR-2200 23dBm/37dBm 92dB
Macro			AX-2200 23dBm/43dBm 100dB

\*Some of the above products are also available in dual band.

Coiler AT Band Selective Repeater Series

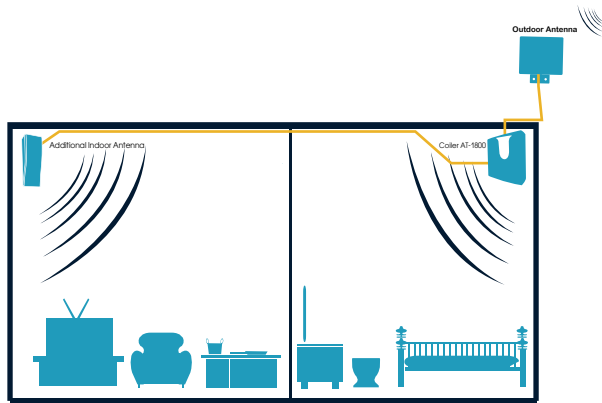
QW-05040; AT-1800 ver A5



Coiler Corporation offers an extensive portfolio of indoor and outdoor repeaters for RF signal enhancement. Our products allow mobile network carriers, system integrators and cell phones users to quickly and cost-effectively address coverage considerations and improve reception in iDEN, CDMA, GSM, DCS, PCS, UMTS, WiMAX and LTE networks. Some global operators such as Vodafone, Orange, T-Mobile, Telefonica o2, Telenor, Tele2, Singtel, KPN and others have trusted our experience and expertise.



## Sample Installation



## Dimensions

Top View



Front View



(All Measurements in Millimeters)

## Electrical Specifications:

Frequency Range (Type A)	Uplink: 1710 ~ 1760MHz Downlink: 1805 ~ 1855MHz
Frequency Range (Type B)	Uplink: 1735 ~ 1785MHz Downlink: 1830 ~ 1880MHz
Frequency Adjustable Step	0.1MHz
Bandwidth	10 / 15 / 20 MHz Selectable
Linear Gain (UL/DL)	55dB (GSM) 65dB (LTE)
Out of Band Gain	3GPP TS 36.106 & 143
Gain Adjustment (UL/DL)	35 ~ 55dB (GSM in 1dB steps) 45 ~ 65dB (LTE)
AGC Range	≥ 20dB
Gain Flatness	≤ ± 2dB
Output Power (UL/DL)	+10dBm (GSM) +13dBm (LTE)
Max. I/P Without Damage	≥ +10dBm
EVM	≤ 8% RMS (LTE)
Spurious Emission	3GPP TS 36.106 & 143
Operating Band Unwanted Emission (LTE)	3GPP TS 36.106
Return Loss	≤ -14dB
Group Delay	≤ 3.3μs
Noise Figure @ Full Gain	≤ 6dB
@ Min Gain	≤ 6dB
Power Consumption	≤ 10W
System Impedance	50Ω
PCDE	≤ -35dB
Frequency Stability	≤ 0.01ppm
ACRR (UL/DL)	≥ 20dB / ≥ 20dB
Power Requirements	100 ~ 240VAC / 47 ~ 63Hz

## Mechanical & Environmental:

Weight	< 1.5 kg
Dimensions	103.5 x 149 x 30.5 mm
Operating Temperature	+0°C ~ +50°C
RF Connector Type	SMA Female (1 x BTS, 1 x MS)
Local Alarm Indication	LED: AID/AGC, Donor Low Signal

## Certifications & Compliances:

CE	Radio:	3GPP TS 36.106 & 143
	EMC:	EN 301 489
	Safety:	EN 60950-1
RoHS		2011/65/EU Compliant
WEEE		2012/19/EU Compliant

QW-05040: AT-1800 ver A5 (August 06, 2013 - Standard) - All data subject to change without prior notice