



Pisces: Plug & Fish Out Signal

Pisces, or PS-2200 is Coiler's Pico level ICS (Isolation Cancellation System) repeater. ICS technology enables the Pisces to be equipped with built-in donor and service antennas so getting the Pisces up and running is as easy as plugging in the power. With intuitive LED indicators, every mobile phone user can place the PS-2200 at a location with best signal for optimal performance. Simple and complete, the PS-2200 digital ICS repeater is a unique offering for carriers to solve 3G network coverage problems of their clients instantly.

Key Features and Benefits

Instant System Extension

Combining 6 dBi of gain from the built-in donor and service antennas and the system module gain of 70dB, Pisces can improve the 3G signal up to 82dB! Providing UL/DL output power of +13/+10dBm, it can effectively cover a variety of smaller indoor areas.

Plug & Connect

Installation has never been easier! Just plug Pisces in and enjoy instant 3G coverage extension.

Integrated LED Display

For user convenience, an LED display provides power and alarm status. Additionally, there are two sets of LED to display Received Signal Strength Indication (RSSI) and isolation, so finding the best location for the unit to be placed is really easy.

Isolation Cancellation System with AGA

Say "good bye" to oscillation problem! PS-2200's 25dB isolation cancellation system range makes donor and service antennas within the same unit possible. Should isolation be less than perfect, due to where the Pisces is placed, Automatic Gain Adjustment (AGA) will adjust the gain accordingly.

Network Safety

Automatic Gain Control (AGC) function ensures that the unit does not surpass its intended output power and eliminates signal spikes that may interfere with base stations.

Configuration with OMT

Configure UMTS channels on PS-2200 via Coiler's OMT software. Also, monitor isolation, gain and output power in precise numerical values via OMT.

Service Multiple Areas

Need service improvement in more than one area? No problem! Pisces comes with antenna extension port, so coverage to multiple rooms can be provided by one unit.

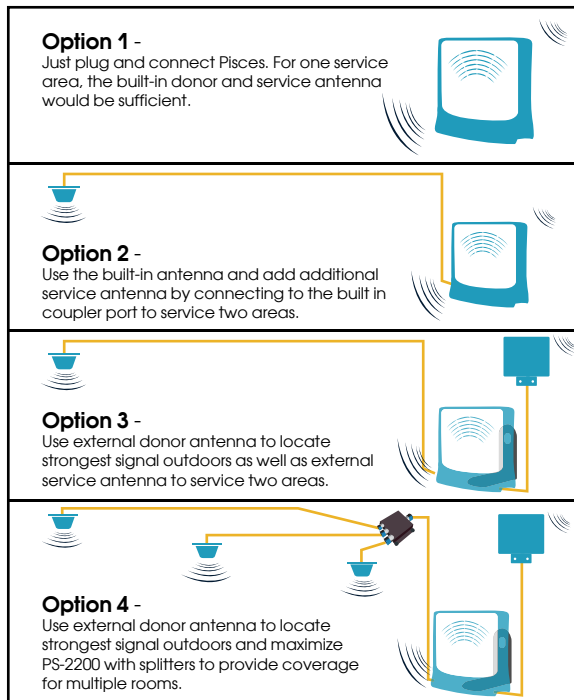
Optional External Donor Antenna & Wall Mount

Should the RSSI level be too weak indoors, built-in donor antenna can be disconnected and external cabling and antenna can be used to locate better signal location. When external cabling is used, wall mount bracket can be used to secure the stability of the unit.

	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/40dBm 85dB/93dB
Macro	AX-900 29dBm/30dBm 95dB		AX-2200 23dBm/43dBm 100dB

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

Antenna Usage Options



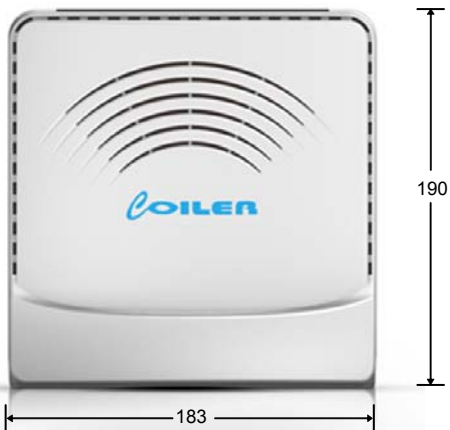
Note: wall mount bracket available for repeater stability when external cabling is used (see example in option 2 & 3).

Dimensions

Top View



Front View



(All Measurements in Millimeters)

Electrical Specifications:

Frequency Range	Uplink: 1920 ~ 1980MHz Downlink: 2110 ~ 2170MHz
Bandwidth	5/10/15MHz
Module Linear Gain (UL/DL)	70dB
System Gain (UL/DL)	<82dB
with Embedded Antennas	3GPP TS 25.143
Out of Band Gain	50 ~ 70dB (in 1dB steps)
Gain Adjustment (UL/DL)	≥ 25dB
AGC Range	≥ 25dB
AGA Range for Isolation	≤ ± 1.5dB
Gain Flatness	≤ 0.01 ppm
Frequency Stability	+13dBm / +10dBm
Output Power (UL/DL)	≥ +10dBm
Max. I/P Without Damage	≤ 12.5% RMS
EVM	3GPP TS 25.143
Spurious Emission	≤ -14dB
Return Loss	≤ 6μs
Group Delay	≤ 6dB
Noise Figure @ Full Gain	≤ 8dB
@ Min Gain	18W
Power Consumption	50Ω
System Impedance	≤ -35dB
PCDE	3GPP TS 25.143
ACPR	≥ 90dB
DL-UL Isolation	G = I + 10dB
ICS Performance	500ns
ICS Window Size	6V/4A AC-DC Adaptor
Power Requirements	

Mechanical & Environmental:

Weight	≤ 3kg
Dimensions	183 x 190 x 105mm
Operating Temperature	0°C ~ +40°C
Humidity	5 ~ 95%
Housing	IP20
Embedded Antenna Gain	6dBi per antenna
MS Couple Port Loss	10dB
Local Alarm Indication	Shutdown Alarm

Certifications & Compliances:

CE	Radio:	EN 301 908 3GPP TS 25.143
	EMC:	EN 301 489
	Safety:	EN 60950-1
RoHS		2011/65/EU Compliant
WEEE		2012/19/EU Compliant