



MORECOM

Overview

RF MORECOM is a Korea leading supplier of RF and M/W passive and active Components and modules based on high technology in design, development and manufacturing applicable to wireless telecommunications, military equipment, and space communication, utilizing our unique strengths to provide differentiated value-added product and services that offer a competitive advantage in the eyes of our customers.

RF MORECOM is now recognized as a global leader in the field of wireless Telecommunications. We continue expand our proprietary technical expertise, Rapid products development capacity, unmatched customer service and high-End technical support across the broadest range of markets and applications.

Mission

RF MORECOM is an emerging high advanced technology provider in design and development and production of innovative RF solutions. Morecom provide a level of expertise dedicated to your design and application needs. Our engineer staff serve you with high performing, reliable, low-cost solutions in various areas in wireless telecommunication industry.

Our mission is to provide high quality products to our customers with not only the very best in Service and value but also help them to find better solution for their applications.

Chan-Sik Bae President&CEO RF MORECOME COREA Co., Ltd

- 01 MISSION | To provide customers with cutting-edge technology that is economic, scalable and future oriented.
- 02 MISSION | To delivery high speed action and high quality into the customer's applications.
- 03 MISSION | To be the worldwide strong RF & M/W components and module manufacturer based on long term supports and under strong faith.



History

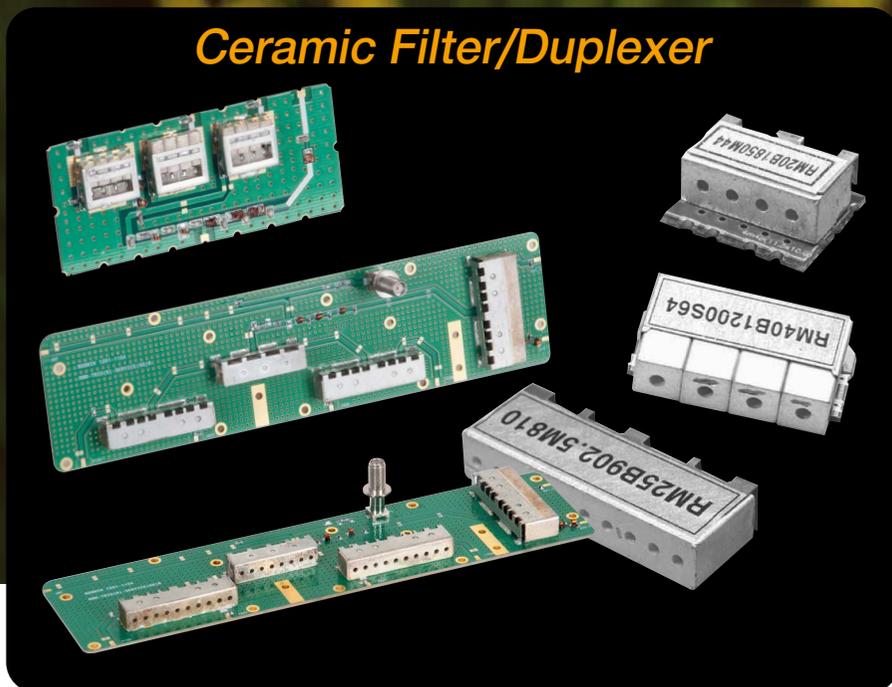
- Sep. 1994 **Company Established.**
- July. 1995 **Developed Dielectric Filter/Duplexer for WLL**
- Jun. 1996 **Established R&D center.**
- May. 2003 **Expansion Production line for cavity Duplexer and Filter**
- Feb. 2004 **Joint Factory establishment at Yantai factory in China**
- Dec. 2006 **RFM Wireless Established**
- May. 2007 **Development of TDD Wimax Filter Module**
- Jun. 2011 **9 band multiplexer development**
- Sep. 2013 **MCPA 60Watt development**
- Feb. 2013 **4 by 4 hybrid coupler development**
- Mar. 2014 **ICS home repeater development**
- Jun. 2015 **12 bands MUX development**
- Nov. 2015 **Triple digital small power repeater development**
- Apr. 2016 **Triple band small RF repeater development**
- May. 2017 **Public safety RF Repeater Development with SNMP.**
- Sept. 2017 **2.3GHz LTE TDD ICS Digital Repeater Development**
- Feb. 2018 **S-band Filter development for Aircraft**
- Apr. 2019 **5G filter 9 patents acquired.**
- Jun. 2020 **Nominated of Small Giant company of Korea.**

Manufacturing Certified Capabilities

- ▶ ISO 9001 Certificated
- ▶ ISO 14001 Certificated
- ▶ RoHS Compliant Certificated
- ▶ TS 16949 Certificated



Ceramic Filter/Duplexer



Description

RFM's advanced material and circuit design technology make discrete type and mono block type filter/duplexer with ultra compact size, low cost, and highly suitable for surface mounting. Our rigid process control and thorough quality control system make sure performance and reliability.

Features

- Ultra compact size,
- Sharp rejection and lowest loss characteristics.
- SMD/DIP type. Wide band and 10Watt AVG.
- Long-life warranty.

Applications

- DC to 13GHz of frequency rang
- Military and commercial wireless system.

Resonator (TE/TEM Mode)



Description

RFM design and develop and manufacture customized product. Its advanced design and manufacturing technology help customer to get excellent characteristics and compact size and low cost and high reliability.

Features

- Ultra compact size (Air cavity type and DR cavity type)
- Sharp rejection and lowest loss characteristics.
- Variety of connector types available
- High power-rating up to 500Watt AVG.
- Long-life warranty

Applications

- 10MHz to 25GHz of frequency range
- Military and commercial wireless system.

Filter, Duplexer & Mux



Description

RFM design and develop and manufacture customized product, Its advanced design and manufacturing technology help customer to get excellent characteristics and compact size and low cost and high reliability.

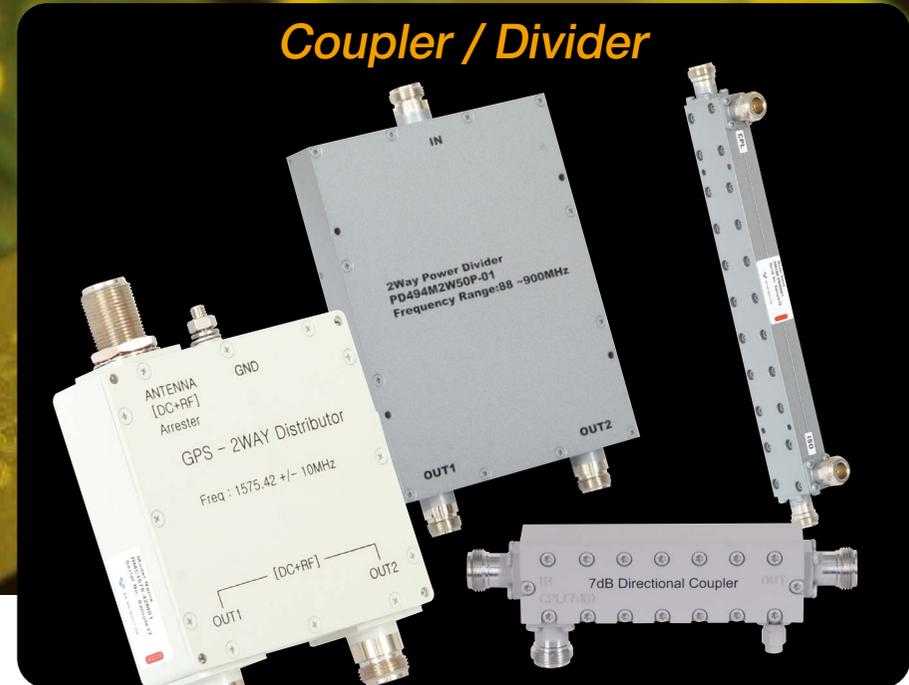
Features

- Low PIMD -161dBc @ 2 tones with 20Watt
- Ultra compact size (Air cavity type and DR cavity type)
- Sharp rejection and lowest loss characteristics.
- Variety of connector types available
- High power-rating up to 500Watt AVG and 2K watt peak.. Long-life warranty

Applications

- Wide band from 10MHz to 25GHz of frequency range
- Military and commercial wireless system,

Coupler / Divider



Description

RFM design and develop and manufacture customized product, Its advanced design and manufacturing technology help customer to get excellent characteristics and compact size and low cost and high reliability.

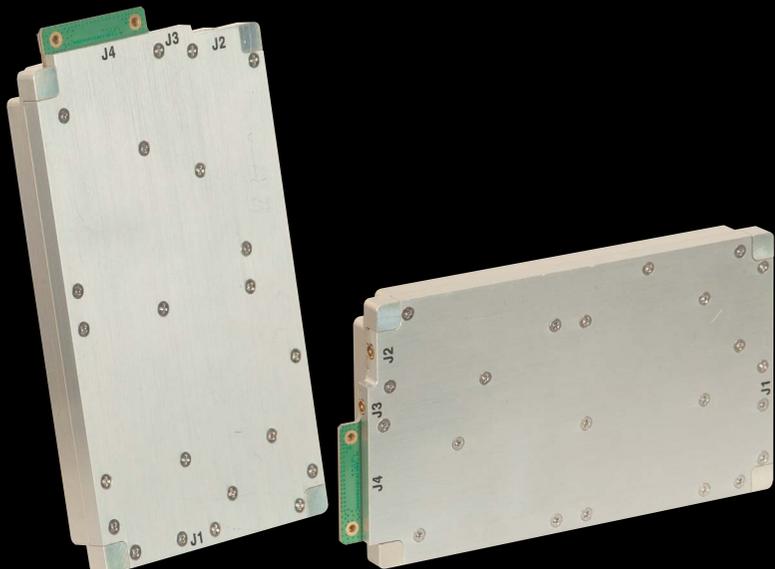
Features

- Excellent directivity for coupler
- Excellent isolation and low loss characteristics for divider.
- Variety of connector types available
- High power-rating up to 300Watt AVG.
- Long-life warranty

Applications

- DC to 30GHz of frequency range
- Military and commercial wireless system,

Switched Bank Filter



Description

The SBF is a switch bank filter, part of the WB Receiver front end, intended to assure the receiver's IP2 performance specification

The SBF have one input and 2 outputs. One output is for 7 bands and the second output is for bands 1-3 & 5,6 and have amplifiers that turn on only when a specific band activate.

There is an option to By-Pass the amplifiers

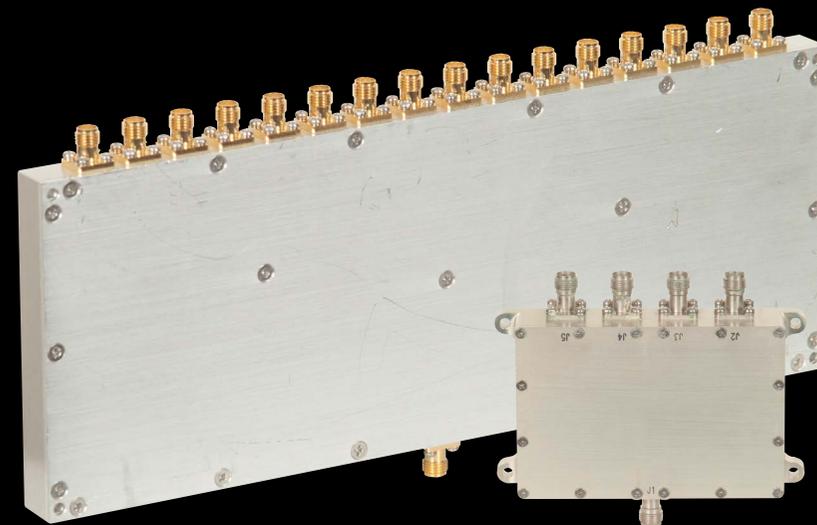
Features

- High Performance
- High IIP2
- 11 Channels

Applications

- Radar System

Combiner / Divider



Description

RFM design and develop and manufacture customized product. Its advanced design and manufacturing technology help customer to get excellent characteristics and compact size and low cost and high reliability.

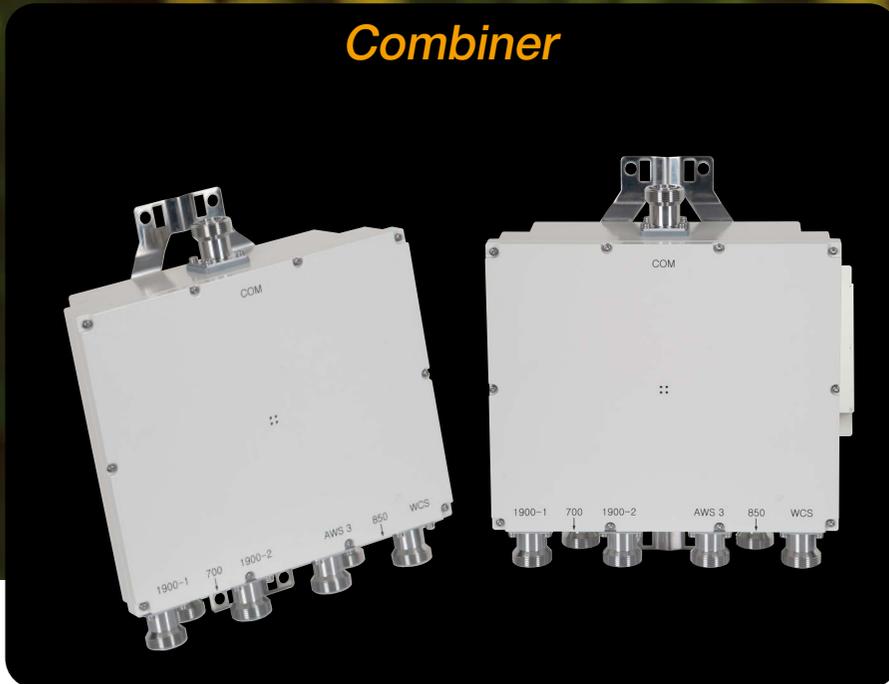
Features

- Excellent directivity for coupler
- Excellent isolation and low loss characteristics for divider.
- Variety of connector types available
- High power-rating up to 300Watt AVG.
- Long-life warranty

Applications

- DC to 30GHz of frequency range
- Military and commercial wireless system.

Combiner



Description

RFM design and develop and manufacture customized product. Its advanced design and manufacturing technology help customer to get excellent characteristics and compact size and low cost and high reliability.

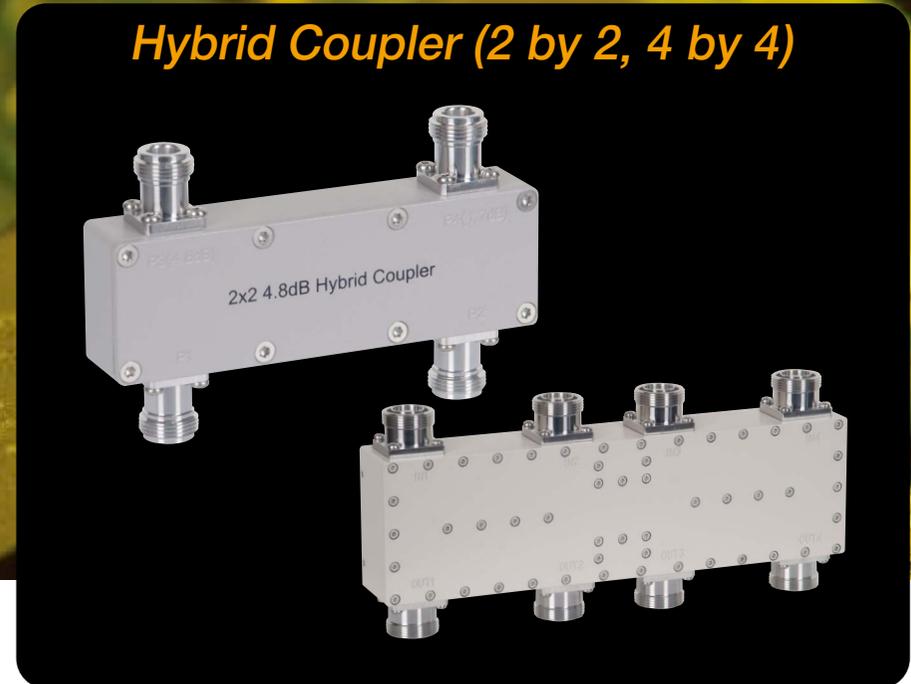
Features

- Low PIMD -161dBc @ 2 tones with 20Watt
- Ultra compact size (Air cavity type and DR cavity type)
- Sharp rejection and lowest loss characteristics.
- Variety of connector types available
- High power-rating up to 500Watt AVG and 2K watt peak.. Long-life warranty

Applications

- DC to 30GHz of frequency range
- Military and commercial wireless system.

Hybrid Coupler (2 by 2, 4 by 4)



Description

RFM design and develop and manufacture customized product. It's advanced design and manufacturing technology help customer to get excellent characteristics and compact size and low cost and high reliability.

Features

- Low PIMD -161dBc @ 2 tones with 20Watt
- Excellent directivity for coupler
- Excellent isolation and low loss characteristics for divider.
- Variety of connector types available
- High power-rating up to 300Watt AVG.
- Long-life warranty

Applications

- DC to 30GHz of frequency range
- Military and commercial wireless system.

Passive Solution

Patch Antenna GPS/ Telematics Antenna



Description

RFM patch and active GPS/Telematics antennas are well designed for satellite GPS/XM Radio/Sirius signal in low noise figure, high gain and low voltage operation. Their excellent performance gives a perfect solution to GPS/Telematics system and its application.

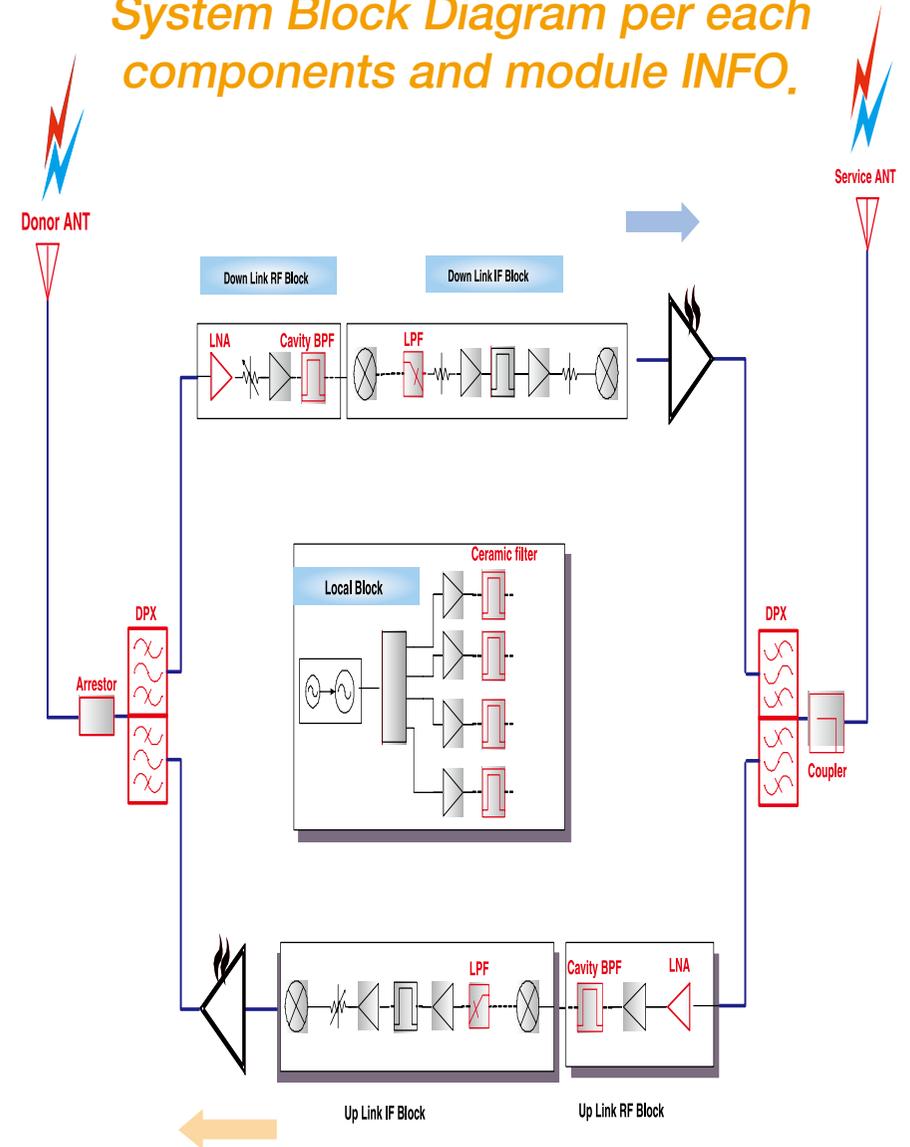
Features

- Excellent gain and satellite signal reception
- Excellent design and reliability
- Various types of mounting method available

Applications

- GPS (Automotive, Aviation, Military, recreational, Timing, Surveying, marine, Mobile communication)

System Block Diagram per each component and module INFO.



Passive components : ANT / Filter / Duplexer / Coupler / Divider
Active Components : LNA

GSM 900 TMA



Description

This GSM 900MHz TMA improve Uplink coverage of BTS extremely well with excellent Noise Figure value, and it is mounted on the top of tower to expand and improve the coverage of GSM 900 Base station network..

Features

- GSM900 band full band.
- Tiny slim size and light weight.
- Pole and Wall mounting type.
- IP68

Applications

- GSM 900MHz base station.

GSM 1800 Dual TMA



Description

This Dual band GSM 1800MHz TMA improve Uplink coverage of BTS extremely well with excellent Noise Figure value, and it is mounted on the top of tower to expand and improve the coverage of GSM 1800 Base station network..

Features

- GSM1800 dual full band with one body type.
- Tiny slim size and light weight.
- Pole and Wall mounting type.
- IP68

Applications

- GSM 1800MHz base station

FEU



Specifications

ITEM	SPECIFICATIONS			
	Rx		Tx	
Frequency Range	824~ 849MHz	1710~ 1785MHz	869~ 894MHz	1805~ 1880MHz
Gain	19,0dB+/-0,50dB Min			
IIP3	+18dBm Min			
Noise Figure @ 25C	1,6dB Max 1,8dB Max			
Pass band insertion loss			0,9dB	1,0dB
Pass band return loss	18dB		18dB	
Consumption Current	460mA			
Size	482mm × 254mm × 4U			

Description

RFM design and develop and manufacture customized product. Its advanced design and manufacturing technology help customer to get excellent characteristics and compact size and low cost and high reliability.

Features

- CDMA DCS Dual band with one Rack type.
- Tiny slim size and light weight.

Applications

- CDMA DCS Dual Base station.

DSP(Digital Signal Processor)



Specifications

ITEM	Specification
Frequency Bands	230,4MHz (Downlink), 172,8MHz (Uplink)
Standards Compliance	3GPP & FDD / TDD mode
Channel Elements	Max, 64 channels
RNC	Integrated RNC / Node B
DL/UL Channel Gain Control	10dB/0,5dB step
DL/UL Channel Power Range	-10 ~ -60dBm
RF Output Power	200mW per Carrier Up to 2W per Sector with Optional External HPA, LPA or DPD

Description

RFM design, develop and manufacture customized product. Its advanced design and manufacturing technology help customer to get excellent characteristics and compact size and low cost and high reliability.

Features

- DSP has 64 channels digital filters board for public safety.
- It converts the input signal, which is 172,8~230,4MHz in Downlink/Uplink, to AD and perform interference suppression in FPGA.

Applications

- GSM / CDMA / DCS / Wimax / LTE / WCDMA
- In-building repeater, Wireless system etc.

WCDMA HPA SMT type HPA



Specifications

ITEM	SPECIFICATIONS
Frequency Range	1920~1980 _{MHz} (Carrier BW : 20 _{MHz})
Output Power	+29dBm / WDCMA 4FA
Gain	29 ± dB
Gain Flatness	0,5dB
VSWR (In / Out)	1.5 : 1
DC Current Consumption	600 _{mA} @ 29Vdc
Dimension	60mm × 33mm × 8,7mm

Description

0,5W and 1W HPA utilizes the small repeater and wireless.

Features

- GSM / CDMA / DCS / Wimax / LTE / WCDMA
- SMD Type power Amplifier Module

Applications

- In-building repeater, Wireless system etc.

WCDMA SMT type HPA



Specifications

ITEM	SPECIFICATIONS
Frequency Range	2150 _{MHz} ~ 2170 _{MHz}
Output Power	+33dBm(2W) / WDCMA 4FA
Gain	35 ± dB
Gain Flatness	0,5dB
VSWR (In / Out)	1.5 : 1
DC Current Consumption	1A @ 28Vdc
Dimension	90mm × 45mm × 12,9mm

Description

This 2W and 3W HPA utilizes the small repeaters and wireless

Features

- WCDMA / CDMA
- SMT type Power Amplifier
- Try slim size and light weight

Applications

- In-Building Repeater, Wireless system etc

LTE 2.6GHz HPA



Specifications

ITEM	SPECIFICATIONS
Frequency Range	2500 _{MHz} ~ 2600 _{MHz} (100 _{MHz})
Output Power (Avg, Max)	5W(37.1dBm)/carrier
Number of Carrier	1 carrier Max. (band width 10 _{MHz})
Input Power	Nominal -4dBm/Carrier for 5W
RF Gain	50 ± 0.5dB
RF Gain Flatness	0.5dB @ within 10 _{MHz}
In/Put Return Loss	18dB Min.
Gate Bias On/Off Switchin Time	3us
Operating DC Voltage	27DVC0.5Ddc
EVM	<5%
Size/Weight	135 _{mm} × 90 _{mm} × 12 _{mm}

Description

5W HPA utilizes the small repeater and wireless

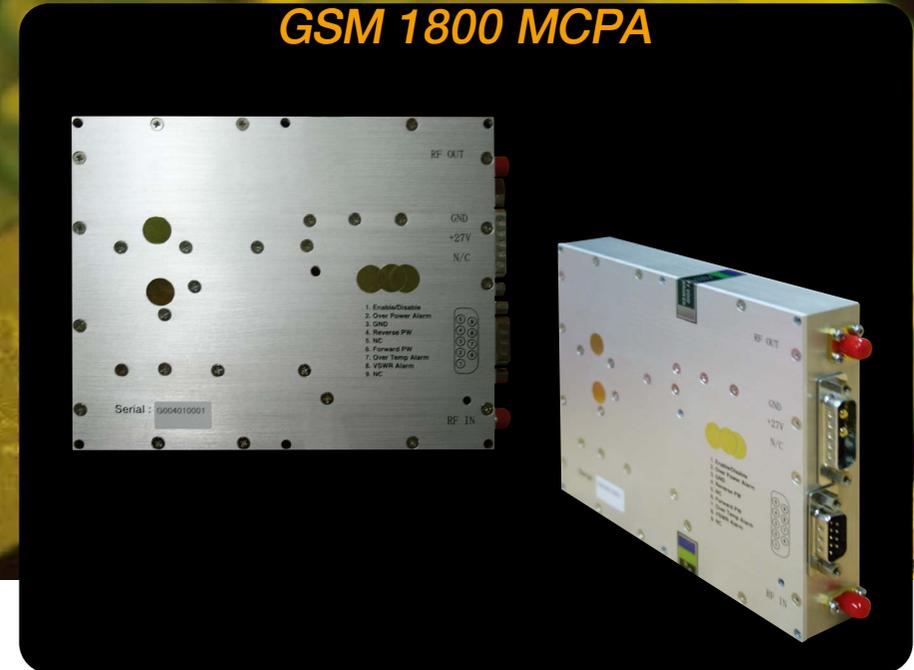
Features

- LTE 2.6GHz

Applications

- Applications
- In-building repeater, Wireless system etc.

GSM 1800 MCPA



Specifications

ITEM	SPECIFICATIONS
Frequency Range	1820 _{MHz} ~ 1880 _{MHz}
Output Power	+43dBm / 10CH CW
Gain	54 ± 1dB
Gain Flatness	0.5dB
VSWR (In / Out)	1.5 : 1
DC Current Consumption	7A max @ + 27Vdc
Dimension	150 _{mm} × 185 _{mm} × 28 _{mm}

Description

This 20W, MCPA utilizes the state-of-the-art proprietary predistortion technique and Class 'AB' biasing to achieve the lowest power consumption for portable internet applications.

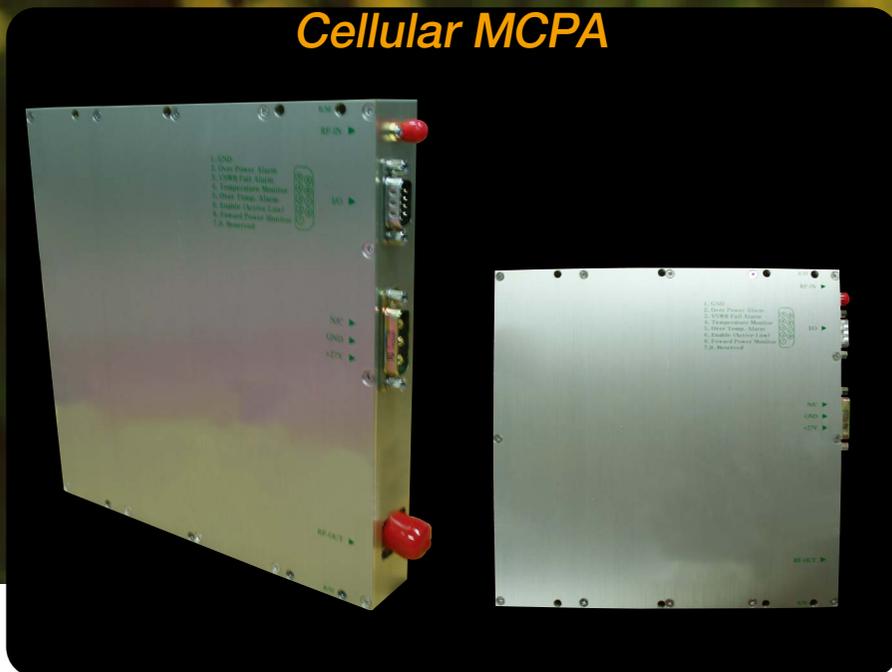
Features

- GSM / CDMA / DCS / Wimax / LTE / WCDMA

Applications

- In-building repeater, Wireless system etc.

Cellular MCPA



Specifications

ITEM	SPECIFICATIONS
Frequency Range	869MHz ~ 894MHz
Output Power	+33dBm(2W) / OFDM
Gain	60 ± 1dB
Gain Flatness	±0,3dB(MAX)
VSWR (In / Out)	1,3 : 1
DC Current Consumption	3,7A @+27Vdc
Group Delay	10ns
Operating Temperature	-20°c ~ +50°c
Dimension	120mm × 120mm × 25mm

Description

20W and 25W MCPA utilize the state-of-the-art proprietary Predistortion technique and class 'AB' biasing to achieve the lowest power consumption for portable internet applications.

Features

- GSM / CDMA / DCS / Wimax / LTE / WCDMA

Applications

- In-building repeater, Wireless system etc.

450MHz LPA



Specifications

ITEM	SPECIFICATIONS
Frequency Range	462 ~ 472 MHz
Output Power	+49dBm(80W)
Gain	54 ± 1dB
Gain Flatness	±0,5 dB
VSWR (In / Out)	1,3 : 1
DC Current Consumption	33A @+28 V dc
2nd Harmonics	-45dB
Operating Temperature	-20° C ~ +85° C
Dimension	400mmx260mmx55mm

Description

80W LPA is an amplifier that functions with 450MHz broadband CDMA signals. Its gain is 54dB and satisfies the specifications of spurious regarding RF average output power of 80W. It is equipped with the feed forward method for linearity technology.

Features

- CDMA450
- Linear all-mode operation with automatic
- Thermal shutdown protection built-in,
- Remote control feature available to switch in/out the amplifier

Applications

- 450MHz Base Station Repeater, Wireless system etc.

Active Solution

WCDMA Home Repeater



Specifications

ITEM	SPECIFICATIONS
Fwd Frequency	2155MHz ~ 2170MHz
Rvs Frequency	1965MHz ~ 1980MHz
Max. Output Power	+5dBm/Total (Fwd)
	+13dBm/2FA (Rvs)
System Gain	60~62dB (Fwd)
	30~55dB (Rvs)
Size	80mm × 120mm × 32mm

Description

This WCDMA Direct RF repeater clears radio shaded areas for personal service like home and small office coverage solution, and low cost effective.

Features

- WCDMA Full band direct RF type.
- Smallest size and light weight.
- Ease Installation and service antenna embedded.
- AGC/Auto Isolation Checking/Auto Limit Control/LED Alarm/Sleep Mode.
- 3GPP

Applications

- Radio Shaded Room/Resident Area/Small Office

Ease Installation Overview



Cellular US PCS Dual Band Home Repeater



Specifications

ITEM	SPECIFICATIONS
Fwd Frequency	869MHz~894MHz, 1930MHz~1990MHz
Rvs Frequency	824MHz~849MHz, 1850MHz~1910MHz
Max. Output Power	18dBm (Fwd)
	10dBm (Rvs)
System Gain	55dB (Fwd)
	55dB (Rvs)
Size/Weight	123mm × 101mm × 25mm

Description

This RF repeater clears radio shaded areas for personal service like home and small office coverage solution, and low cost effective.

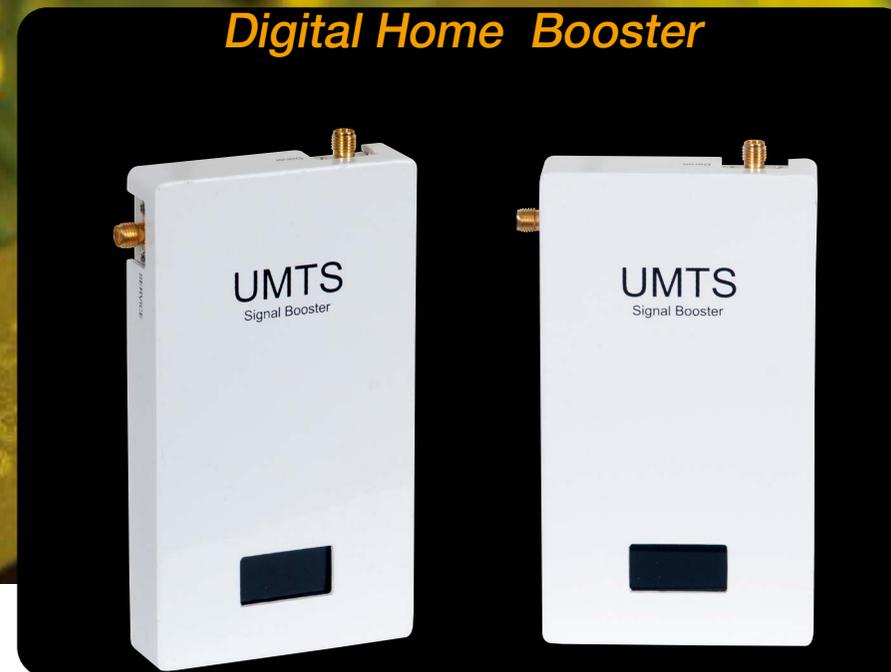
Features

- Cellular, PCS band Dual type.
- Ease Installation
- AGC/Auto Isolation Checking/Auto Limit Control/LED Alarm/Sleep Mode.
- 3GPP

Applications

- Radio Shaded Room/Resident Area/Small Office

Digital Home Booster



Specifications

ITEM	SPECIFICATIONS	
Fwd Frequency	850MHz / 1.8GHz / 2.1GHz	
Gain	65dB	
Output Power	D/L	+15dBm
	U/L	15dBm
System delay	5.0usec	
EVM	3%	
Dimension(H×W×D)	70mm × 125mm × 20mm	

Description

This UMTS Repeater clears radio shaded areas for personal service like home and small office coverage solution, and low cost effective.

Features

- Proper gain control by real time measurement of Isolation between antennas
- Small size than ICS Repeater with same gain and output
- Consumers can be installed directly

Applications

- Radio Shaded Room/Resident Area/Small Office

GSM 1800 Variable CH Selective Repeater



Specifications

ITEM	SPECIFICATIONS
Tx Frequency	1710 _{MHz} ~ 1785 _{MHz}
Rx Frequency	1805 _{MHz} ~ 1880 _{MHz}
Max. Output Power	+14dBm (Tx)
	+14dBm (Rx)
System Gain	70dB (Tx)
	70dB (Rx)
Size/Weight	180mm × 270mm × 50mm, 2kg

Description

The GSM1800 repeater is an indoor wireless variable repeater which amplifies and transmits the same frequency of the signal received from the BTS. Its DSP cancels the feedback signal coming from the service antenna into the donor antenna.

Features

- BCCH Scanning and list up
- Variable Channel Selective
- Ease Installation and service antenna embedded.
- AGC/Auto Isolation Checking/Auto Limit Control/LED Alarm/Sleep Mode.
- Network Management by SNMP2.0

Applications

- Radio Shaded Room/Resident Area/Small Office

GSM 1800 33dBm DSP Repeater



Specifications

ITEM	SPECIFICATIONS
Fwd Frequency	1850 _{MHz} ~ 1880 _{MHz}
Rvs Frequency	1710 _{MHz} ~ 1785 _{MHz}
Max. Output Power	+33dBm (Fwd)
	+20dBm (Rvs)
System Gain	85dB (Fwd)
	85dB (Rvs)
Size	300mm × 450mm × 180mm

Description

This GSM 1800 DSP repeater clears radio shaded areas for personal service like home and small office coverage solution, and low cost effective.

Features

- Extend link distance and available to extend channel up to 2 channel.
- Band selective and Adjustable bandwidth.
- Ease Installation and service antenna embedded.
- Auto Isolation Checking function / Easy installation, smallest size and light weight
- HPA auto control function. - High Selectivity Performance
- Network Management by SNMP2.0

Applications

- Radio Shaded Room/Resident Area/Small Office

RF Triple Band Home Repeater



Specifications

ITEM	SPECIFICATIONS	
Frequency Range	850MHz / 1.8GHz / 2.1GHz	
Gain	65dB	
Output Power	D/L	+17dBm
	U/L	17dBm
System delay	3.0usec	
EVM	3%	
Dimension(H×W×D)	165mm × 111mm × 45mm	

Description

This Triple band home Repeater clears radio shaded areas for personal service like home and small office coverage solution, and low cost effective.

Features

- Smart compact and light weight
- Remote control Supporting (NMS)
- RF Monitoring port
- ASD (Auto Shut Down)
- Isolation check
- Network Management by SNMP2.0

Applications

- Radio Shaded Room/Resident Area/Small Office

RF Triple band Digital Repeater



Specifications

ITEM	SPECIFICATIONS	
Frequency Range	850MHz / 1.8GHz / 2.1GHz	
Gain	87dB	
Output Power	D/L	+15dBm
	U/L	15dBm
System delay	5.0usec	
EVM	3%	
Dimension(H×W×D)	300mm × 400mm × 70mm	

Description

This Triple band Digital Repeater clears radio shaded areas for personal service like home and small office coverage solution, and low cost effective.

Features

- Programmable Bandwidth (10MHz / 20MHz / 30MHz)
- Smart compact and light weight
- Remote control Supporting (NMS)
- RF Monitoring port
- Isolation check
- Network Management by SNMP2.0

Applications

- Radio Shaded Room/Resident Area/Small Office

Pico ICS Repeater



Specifications

ITEM	SPECIFICATIONS	
Frequency Range	2.1GHz	
Gain	30dB	
Output Power	D/L	+10dBm
	U/L	10dBm
System delay	5.0usec	
EVM	EVM ≤ 10% @ Cancellation Condition	
Dimension(H × W × D)	180mm × 110mm × 70mm	

Description

This Pico ICS Repeater clears radio shaded areas for personal service like home and small office coverage solution, and low cost effective.

Features

- Programmable Bandwidth (5MHz / 10MHz)
- Smart compact and light weight
- Remote control Supporting (NMS)
- 5dBi built-in Donor and Service Antenna
- Network Management by SNMP2.0

Applications

- Radio Shaded Room/Resident Area/Small Office

Public Safety Repeater



Specifications

ITEM	SPECIFICATIONS	
Frequency Range	788MHz ~ 805MHz // 806MHz ~ 824MHz	
	788MHz ~ 775MHz // 851MHz ~ 869MHz	
Gain	30dB	
Output Power	D/L	+30dBm // +27dBm
	U/L	+30dBm // +27dBm
System delay	4.0usec	
Interface	SNMP2.0	
Dimension(H × W × D)	450mm × 358mm × 120mm	

Description

This Repeater will improve wireless environment for shadow area in which low signal strength or no signal problem between Base station and mobile station.

Features

- Easy Installation.
- Light and small, One body type.
- Remote control Supporting.
- Built-in AGC, Auto Shut Down function.
- Network Management by SNMP2.0

Applications

- Radio Shaded Room/Resident Area/Small Office

MEMO

MEMO

MEMO

MEMO



Representative Network System



RF MORECOM COREA CO., LTD.

Head office : (17111) #840, 8F, 11, Seocheon-ro 201 beon-gil,
Giheung-gu, Yongin-si, Gyeonggi-do, Republic of Korea

Telephone : +82-31-455-3823 / Fax:+82-31-278-3822

E-mail : sales@rfmkorea.com

www.rfmkorea.com / www.rfmwireless.com