



Intelligent and cost-effective

Hytera Small Cell Solution

Hytera small cell products overview

Outdoor Serials

Single-band Micro Cell



Dual-band Micro Cell



Indoor Serials

Femto Cell
(4G LTE)



Pico Cell
(4G LTE, single-band)



Pico Cell
(5G NR)



Pico Cell
(4G LTE, dual-band)



Extended Serials

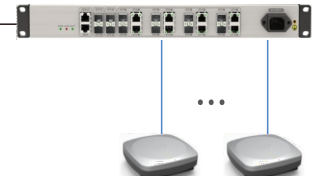
BBU
(4G + 5G dual-mode)



RHUB
(4G + 5G dual-mode)



pRRU
(4G+5G dual-mode)



Outdoor Scenarios



Rural & remote



Highway



Densification

Indoor Scenarios



Café



Library



Meeting Room

Extended Scenarios



Office



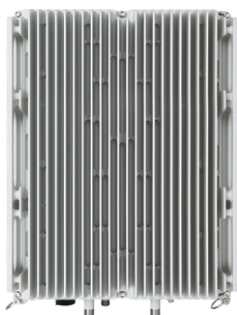
School



Hotel

Product Introduction

4G Single-band Micro-Cell



- IBS3900
For outdoor scenarios

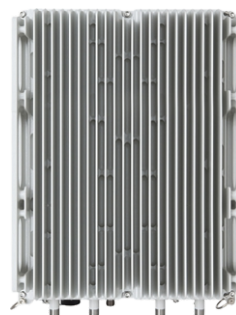
Based on the leading SoC solution, IBS3900 is designed as one-box single-band micro-cell eNB for low density but large coverage scenarios with the following features:

- 2T2R MIMO for higher throughput
- up to 40W per channel for larger coverage
- Plug and play, easy to work
- SON(self-configuration, self-optimization, self-healing)
- Compact design, easy to transport and deploy
- Nature cooling, low noise and more environmental
- IP65 & rugged for harsh environment

Key Items	Specifications
Technology	LTE FDD/TDD
Frequency	B3 , customized for other bands
Bandwidth	up to 20 MHz
Peak throughput	FDD: DL 200Mbps (256QAM), UL 75Mbps (64QAM)
	TDD: DL 140Mbps (256QAM,SF2), UL 30Mbps (64QAM,SF1)
Max user	VoLTE user: 64
	RRC active user:128
	RRC connective user:384
MIMO	2T2R
RF power	2×40W
Volume	17L(typ.)
Weight	16kg(typ.)
Power supply	-48V DC
Consumption	< 350W

Product Introduction

4G Dual-band Micro-Cell



- IBS3902
For outdoor scenarios

Based on the leading SoC solution, IBS3902 is designed as one-box dual-band micro-cell eNB for medium density but large coverage scenarios with the following features:

- Support dual-band to double the throughput
- 2T2R, up to 10W per channel for larger coverage
- Plug and play, easy to work
- SON(self-configuration, self-optimization, self-healing)
- Compact design, easy to transport and deploy
- Nature cooling, low noise and more environmental
- IP65 & rugged for harsh environment

Key Items	Specifications
Technology	LTE FDD/TDD
Frequency	B38+B39, customized for other bands
Bandwidth	up to 20 MHz
Peak throughput (CA)	FDD: DL 2x200Mbps (256QAM), UL 75Mbps (64QAM)
	TDD: DL 2x140Mbps (256QAM,SF2), UL 30Mbps (64QAM, SF1)
Max user	VoLTE user: 32 x 2
	RRC active user:64 x 2
	RRC connective user: 192 x 2
MIMO	2T2R (per band)
RF power	2×(2×10W)
Volume	26L(typ.)
Weight	25kg(typ.)
Power supply	-48V DC
Consumption	< 400W

Product Introduction

4G Femto-Cell



- IBS3900F
For indoor scenarios

IBS3900F is designed as the intelligent femto-cell eNB for indoor coverage, especially for family scenarios with the following features:

- Super capacity and coverage based on the high performance SoC platform;
- Plug and play, zero-touch and easy to work;
- Cost-effective with SoC platform;
- Small form factor, compact & modern design for the modern environments;
- Intelligent EMS with SON to improve the operation efficiency and save OPEX;

Key Items	Specifications
Technology	LTE FDD
Frequency	B1 / B3, customized for other bands
Bandwidth	up to 20 MHz
Peak throughput	DL 200Mbps (256QAM) UL 75Mbps (64QAM)
Max user	VoLTE user: 32
	RRC active user: 32
	RRC connective user: 64
MIMO	2T2R
RF power	2x(50 ~ 100mW)
Volume	140mm(H) x175mm(W) x25mm(D)
Weight	0.5kg
Consumption	<12W

Product Introduction

4G Pico-Cell



- IBS3900P
For indoor scenarios

IBS3900P is designed as the intelligent pico-cell eNB for indoor coverage, especially for enterprise scenarios with the following features:

- Super capacity and coverage based on the high performance SoC platform;
- Plug and play, zero-touch and easy to work;
- Cost-effective with SoC platform;
- Small form factor, compact & modern design for the modern environments;
- Intelligent EMS with SON to improve the operation efficiency and save OPEX;

Key Items	Specifications
Technology	LTE FDD
Frequency	B1 / B3, customized for other bands
Bandwidth	up to 20 MHz
Peak throughput	DL 200Mbps (256QAM) UL 75Mbps (64QAM)
Max user	VoLTE user: 32
	RRC active user: 64
	RRC connective user: 96
MIMO	2T2R
RF power	2 x (125 ~ 200mW)
Volume	220mm(H) x 220mm(W) x 39mm(D)
Weight	0.65kg
Consumption	<15W

Product Introduction

4G Dual-band Pico-Cell



- IBS3902P
For indoor scenarios

IBS3902P is designed as the intelligent pico-cell eNB for indoor coverage, especially for enterprise scenarios with the following features:

- Dual-band configuration and double capacity with CA on high performance SoC platform;
- Plug and play, zero-touch and easy to work;
- Cost-effective with SoC platform;
- Small form factor, compact & modern design for the modern environments;
- Intelligent EMS with SON to improve the operation efficiency and save OPEX;

Key Items	Specifications
Technology	LTE FDD/TDD
Frequency	B1+B3 / B40+B40, customized for other bands
Bandwidth	up to 20 MHz
Peak throughput(CA)	FDD: DL 2 x 200Mbps (256QAM), UL 75Mbps (64QAM)
Max user	VoLTE user: 32 x 2
	RRC active user: 64 x 2
	RRC connective user: 96 x 2
MIMO	2T2R
RF power	2 x (2 x 250mW)
Volume	220mm(H) x 220mm(W) x 40mm(D)
Weight	1kg
Consumption	<22W

Product Introduction

5G Pico-Cell



- IBS5900P
For indoor scenarios

IBS5900P is the cutting-edge 5G pico-cell gNB to address the challenges of high-frequency 5G indoor coverage. IBS5900P is designed with following features:

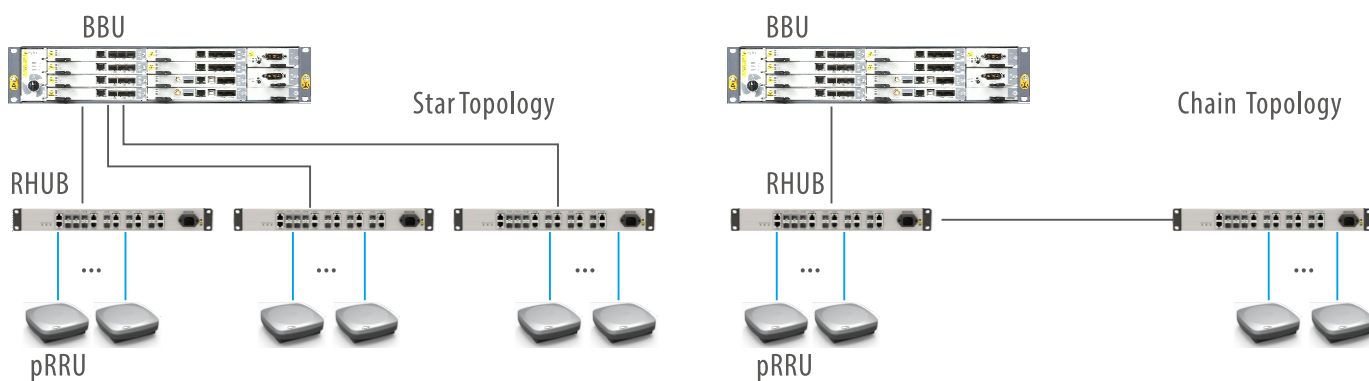
- High capacity and low latency on cutting edge 5G SoC platform;
- Directly to 5G SA;
- Plug and play, zero-touch and easy to work;
- Small form factor, compact & modern design for the modern environments;
- Intelligent EMS with SON to improve the operation efficiency and save OPEX;

Key Items	Specifications
Technology	5G NR
Frequency	N41 / N78, customized for other bands
Bandwidth	up to 100MHz
Split option	Option2
Max user	VoNR: 32
	RRC active user: 64
	RRC connective user: 128
MIMO	2T2R
RF power	2 x 250mW
Volume	200mm(H) x 200mm(W) x 62mm(D)
Weight	2Kg
Consumption	<25W

Product Introduction—4G Single-mode and 4/5G Dual-mode Extended Pico-Cell

Following O-RAN architecture, Hytera provides customer the cutting-edge 4/5G dual-mode extended pico-cell solution for the large scale indoor coverage and 5G intelligent application in vertical industries with following features:

- Superior capacity and larger coverage with flexibility and scalability;
- Interwork between the equipment from multi-vendor with open interface;
- Cost-effective with GPP platform and Intelligent Operation and maintenance;
- Cloud-native platform promotes the ICT convergency for the intelligent application;



The network topology of extended pico-cell



- BBU3801
4G Single-mode Extended Pico-Cell BBU

Key Items	Specifications
Technology	LTE FDD/TDD
Cells / BBU	up to 6 Cells
UEs / Cell	up to 400 act.
HUBs / BBU	Up to 4
pRRU / HUB	Up to 8
Dis.between BBU & HUB	Up to 20KM
Dis.between HUB & pRRU	100m(typ.)
Sync	GNSS, 1588
EMS interface	TR069, customized
Consumption	200W(typ.)
Weight	<2.5kg
Dimension	19 inch 1U



- BBU5900M
4/5G Dual-mode Extended Pico-Cell BBU

Key Items	Specifications
Technology	5G NR LTE FDD/TDD
Cells / BBU	5G NR: up to 6 LTE: up to 6
UEs / Cell	5G NR: 400 act. LTE: 400 act.
HUBs / BBU	Up to 8
pRRU / HUB	Up to 8
Dis.between BBU & HUB	Up to 20KM
Dis.between HUB & pRRU	100m(Cat6a) 200m(Cat5)
Sync	GNSS, 1588
EMS interface	TR069, customized
Consumption	300W(typ.)
Weight	<16Kg
Dimension	19 inch 2U

Product Introduction—4/5G Dual-mode Extended Pico-Cell



- HUB3900
4G Single-mode RHUB

Key Items	Specifications
Technology	LTE FDD/TDD
Bandwidth/MIMO	20MHz / 2T2R
Uplink interface	1 x 1G SFP+, 5KM typ.,
Downlink interface	8 x ETH, 100m
Cas. Link	1 x 1G SFP+, 5KM typ.,
Consumption	150W
Dimension	370mm x 220mm x 44mm
Weight	< 3Kg



- HUB5900M
4G/5G Dual-mode RHUB

Key Items	Specifications
Technology	5G NR LTE FDD/TDD
Bandwidth/MIMO	5G: 100MHz / 4T4R LTE: 20MHz /2T2R
Uplink interface	1 x 10G SFP+, 5KM typ.
Downlink interface	8 x 10G SFP+, 200m
Cas. Link	1 x 10G SFP+, 5KM typ.
Consumption	300W (typ.)
Dimension	440mm x 310mm x 44mm
Weight	< 4.7Kg



- PRU3900
4G Single-mode pRRU

Key Items	Specifications
Technology	LTE FDD/TDD
Frequency	B1 / B3, customized for other bands
Bandwidth	up to 20MHz
MIMO	2T2R
RF power	2 x 125mW
Consumption	< 15W
Ant.	Build-in or External Ant
Dimension	220mm x 220mm x 39mm
Weight	< 0.6Kg



- PRU5900M
4G/5G Dual-mode pRRU

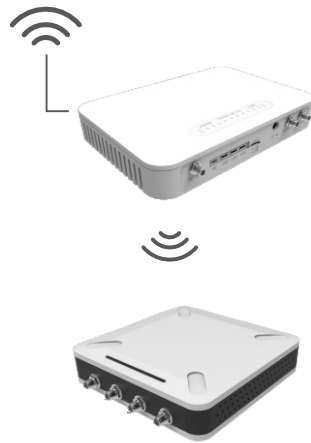
Key Items	Specifications
Technology	5G NR LTE FDD/TDD
Frequency	N41 + B41, customized for other bands
Bandwidth	5G: up to 100MHz LTE: up to 20MHz
MIMO	5G: 2T2R / 4T4R LTE: 2T2R
RF power	5G: 4 x 250mW LTE: 2 x 125mW
Consumption	< 50W
Ant.	Build-in or External Ant
Dimension	218mm x 222mm x 60mm
Weight	< 2.5Kg

Hytera mini-Repeater Products Overview

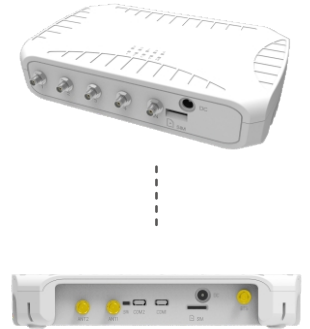
Mini-Repeater provides cost-effective solution to improve 2/3/4/5G coverage where the signal is poor, especially indoor scenarios.



Micro-Repeater



Elevator Micro-Repeater



Extended Micro-Repeater



Village in City



Villa



Office



Shopping Mall



Hotel



Dorm



Parking Lots



Factory



Storehouse

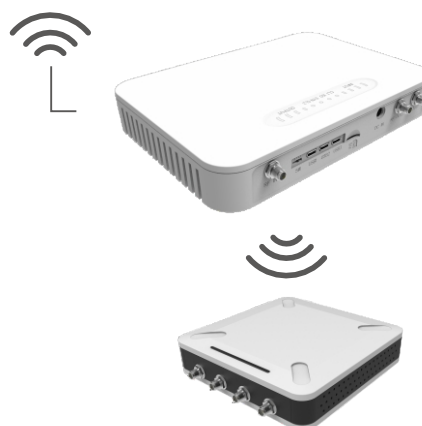
Mini-Repeater Product Introduction



- DAS3900F
2/3/4G Micro-Repeater

DAS3900F is the typical micro-repeater product that focus on small areas especially indoor environments. It supports intelligent noise reduction and automatic gain control, silent uplink when there is no service in the uplink, and is designed with strict suppression of interferences such as blocking interference, second harmonics, and spurious interference. Wireless backhaul is also supported.

Key Items	Specifications
Technology	2G & 4G , 3G & 4G , 2G & 3G & 4G
Maximum power	17±2dBm
Maximum gain	DL: 70±3dB , UL: 65±3dB
Latency	≤ 1us
EVM	≤8%@QPSK
ALC	≥30dB
Weight	≤1kg
Size	205×145×41mm



- DAS3901F
Elevator Micro-Repeater

DAS3901F is designed specially for wireless coverage in elevator cabinet, which consists of the host and the slave equipment. The host is installed on the roof of elevator hoistway, amplifying and forwarding the outdoor signal to the shaft, and the slave is placed on the top of the elevator cabinet, receiving the transmitted signal for secondary amplification and covering the cabinet.

Key Items	Specifications	
	Host Unit	Slave Unit
Technology	2G & 4G, 3G & 4G, 2G & 3G & 4G	
Maximum power	UL: 17±2dBm	UL: 17±2dBm
	DL: 15+2dBm	DL: 0+2dBm
Maximum gain	DL & UL: 70±3dB	DL: 50±3dB, UL: 45±3dB
Latency	≤ 1us	
EVM	≤8%@QPSK	
ALC	≥30dB	≥25dB
Weight	≤1kg	≤2kg
Size	180×114×36 mm	125×125×45 mm

Mini-Repeater Product Introduction



- DAS3902F
2/3/4G Extended Micro-Repeater

DAS3902F is the extended micro-repeater specially for the middle or small size indoor coverage. It solves the 2/3/4G problems simultaneously and improve coverage efficiency. DAS3902F consists of access unit, distribution unit, and coverage unit. Access unit is to introduce the outside signal into the room, and coverage unit is to cover the user and distribution unit is to tune the power by calculating the link budget and signal strength.

Key Items	Specifications	
	Access / Coverage Unit	Distribution Unit
Technology	2G & 4G, 3G & 4G, 2G & 3G & 4G	
Maximum power	UL: 17±2dBm	UL&DL: 15±2dBm
	DL: 15±2dBm	
Maximum gain	DL & UL: 70±3dB	UL: 65±3dB, DL: 70±3dB
Latency	≤1us	
EVM	≤8%@QPSK	
ALC	≥30dB	≥25dB
Weight	≤1kg	≤2kg
Size	205×160×55	225×175×50



- DAS5900F
5G Micro-Repeater

DAS5900F, the 5G NR micro-repeater, supports upgrading on the legacy DAS and can realize the transmission of 2/3/4/5G signals on one single cable. DAS5900F consists of 2 units, managing unit, which combines and outputs the 5G RF signal meanwhile with the 2/3/4G RF signal, monitors the network quality parameters, and coverage unit, which combines the 5G RF signal in passive DAS and the 2/3/4G RF signal in the cable, then get output via the built-in antenna.

Key Items	Specifications	
	Managing Unit	Coverage Unit
Maximum gain	DL: 10dB	DL: 55dB
	UL: 10dB	UL: 50dB
RF Power	-65dBm (UL)	24dBm(DL)
VSWR	≤2	≤2
Power supply	-48V DC	-48V DC
Consumption	≤25W	≤15W
ACL	30dB	30dB
Weight	Customized	≤1kg
Size	Customized	200×176×58mm



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