HYTEC INTER Co.,Ltd.

World's Most Compact Private 5G O-RAN Platform
~PoC system~

5GC/CU/DU/PTP GM configurable on-premise with a single industrial server with wide operating temperature range
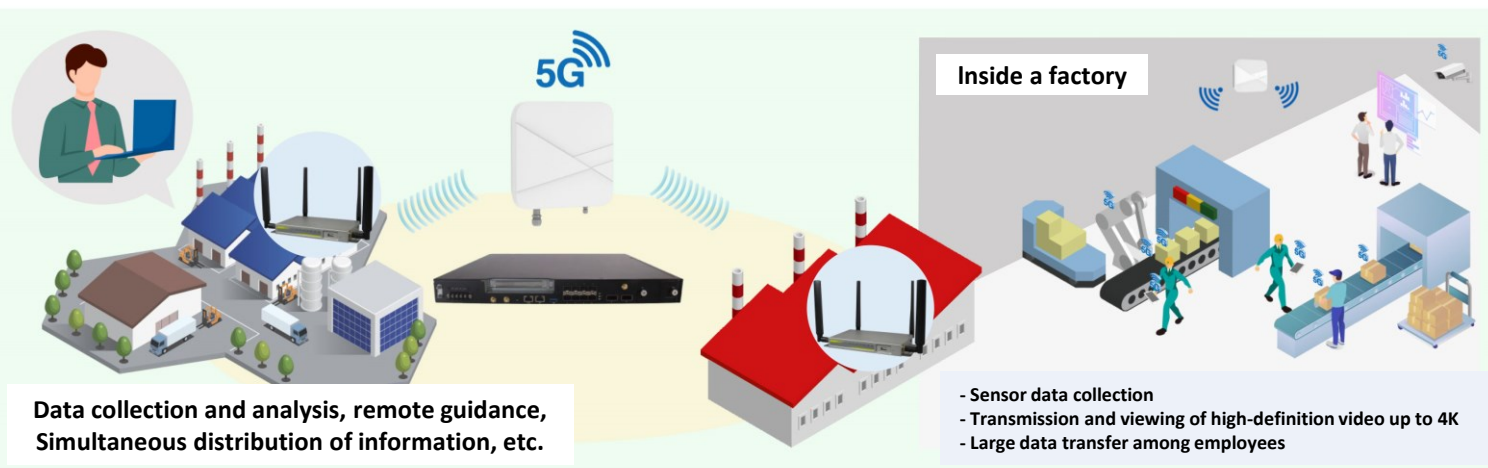
Total PoC system including a local 5G-compliant industrial router, video transmission equipment, and license application support

Features

- Semi-synchronous TDD uplink over 300Mbps
- 1 radio unit for 1 CU/DU (planning up to 2 radio units)
- Up to 32 devices for 1 radio unit
- 5G core is fully on-premise network compatible, creating a secure environment
- 5GC CU/DU compact integrated server (in one box)
- 5GC and CU/DU separation support
- Multiple base station vendors supported
- One-stop providing including 5G router for industrial use
- Provides system evaluation with low latency 4K video solution
- Full support for license applications

Configuration Example

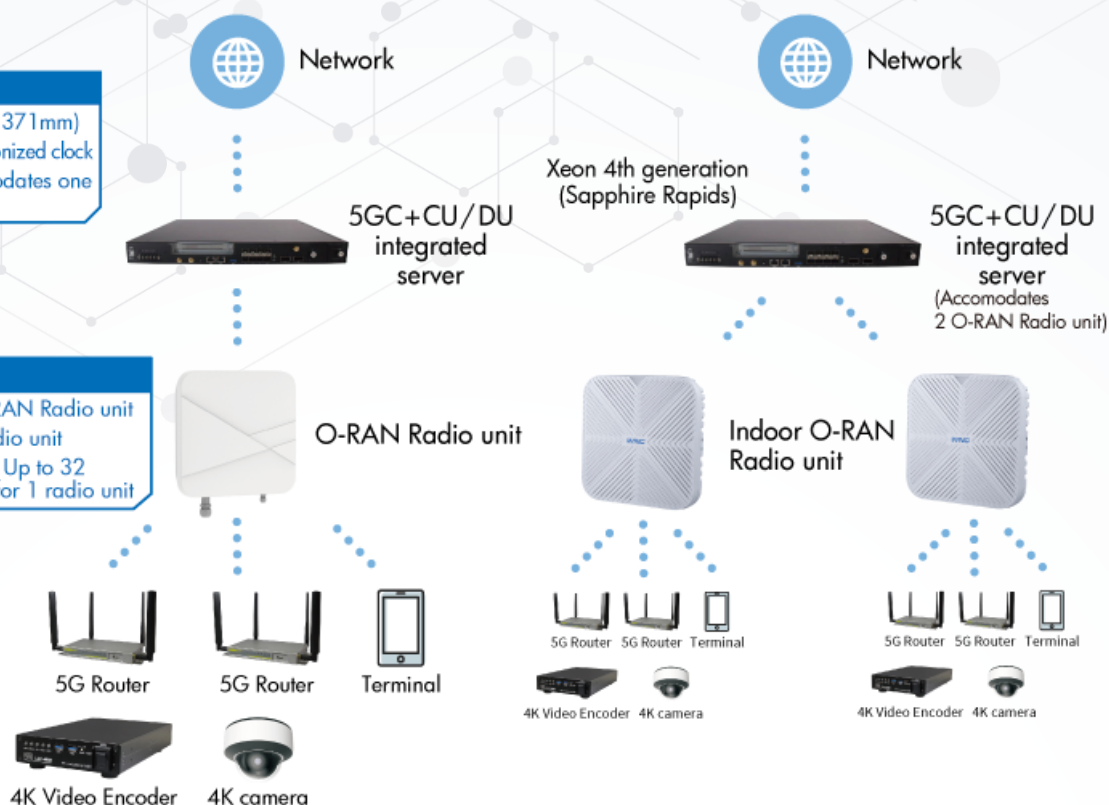Data collection and analysis, remote guidance, Simultaneous distribution of information, etc.

Inside a factory

- Sensor data collection
- Transmission and viewing of high-definition video up to 4K
- Large data transfer among employees

Compact Private 5G Platform

PoC model	Commercial Model I (2024 Q3 (CY))

PoC model:

Network

Server
- Compact (1U, depth 371mm)
- Built-in GPS for synchronized clock
- PoC model accommodates one O-RAN Radio unit

5GC+CU/DU integrated server

O-RAN Radio unit
- Compact indoor O-RAN Radio unit
- Outdoor O-RAN Radio unit
- 1 O-RAN Radio unit Up to 32 devices connections for 1 radio unit

O-RAN Radio unit

5G Router   5G Router   Terminal

4K Video Encoder   4K camera

Commercial Model I:

Network

Xeon 4th generation (Sapphire Rapids)

5GC+CU/DU integrated server (Accomodates 2 O-RAN Radio unit)

Indoor O-RAN Radio unit

5G Router 5G Router Terminal

4K Video Encoder 4K camera

5G Router 5G Router Terminal

4K Video Encoder 4K camera

Specification

System		CU/DU/5GC server	
3gpp Release	Release 15	CPU	Intel Xeon D
Modulation scheme	DL: QPSK/16QAM/64QAM/256QAM UL: QPSK/16QAM/64QAM	Physical interface	1x GbE RJ45 IPMI, 8x 10G SFP+, 1x RJ45 Console, 1x USB 3.0,
Fronthaul interface	O-RAN split option 7.2x	Input power	100V~240VAC / -57~40VDC (optional)
TDD slot format	Sync TDD, Semi-sync TDD1/2/3	Power consumption	≦400W
Time Synchronization	PTP (G.8275.1)	Operating temperature	0~40℃(AC model) / -40~65℃(DC model)
device connection capacity	Up to 32 devices per 1 RU	Operating humidity	5~95%
RU connection capacity	Up to 2 RUs per 1 server	Size & Weight	438 x 371 x 44mm (19" 1U)

Indoor radio unit		Outdoor radio unit	
Frequency band	5G NR n79 (4800~4900MHz) / 100Hz band		
Antenna	External (x4 SMA ports)	Internal (x8 port)	
Maximum TX power	1W (250mW x 4 ports)	2W (250mW x 8 ports)	
Physical interface	1x 10G SFP+, 1x 1GbE RJ45, 1x 10GbE RJ45	1x 10G SFP+, 1x 1GbE RJ45, 1x 10GbE RJ45	
Data streams	4 steams / 4T4R	4 streams / 8T8R	
Input power	12VDC / PoE++	-48VDC	
Power consumption	≦60W	≦100W	
Operating temperature	-5~+40℃	-40~+55℃	
Size and Weight	260 x 242 x 42mm, weight < 2.3kg	390 x 390 x 135mm, weight < 12kg	

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For price, delivery date and specification query

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