AGIL. 5G-IN-A-BOX



Mobile Private 5G Networks

AGIL 5G-in-a-Box unlocks access to a range of new solutions and opportunities by overcoming the limitations of bandwidth, latency and massive connections in the most remote or challenging places and situations.

AGIL 5G-in-a-Box provides a powerful tool to manage unexpected or short-term ad hoc scenarios that require high bandwidth and the ability to support large numbers of users.

Its quick deploying, self-contained nature means you can deploy 5G connectivity in times of crisis where existing infrastructure is damaged; or deploy coverage for short-term ad hoc events such as entertainment or sporting events, MICE events and more, to deliver rich immersive experiences.

AGIL 5G-in-a-Box quickly and securely enables transformational applications such as:

- Full automation and teleoperations of robots and drones
- Ultra-reliable low latency systems
- Real-time streaming of high-definition footage
- Capacity to connect and support massive numbers of sensors and assets
- Secure and full control of 5G coverage

Application Scenarios

- Mining
- Remote Areas
- Disaster Relief
- Public Safety
- Defence (Tactical 5G)

Key Features

Easy Deployment

Network-in-a-Box that is ready to be deployed on both mobile platforms for roving connectivity or in tight space-constrained environments, anytime, anywhere

• Ruggedised Enclosure

Durable construction to protect against impact, shock and weather. Water and dust resistant with an IP66 rating, to prevent water and dust ingress

Active Climate Control

Engineered with active climate regulation to ensure operability in extreme conditions

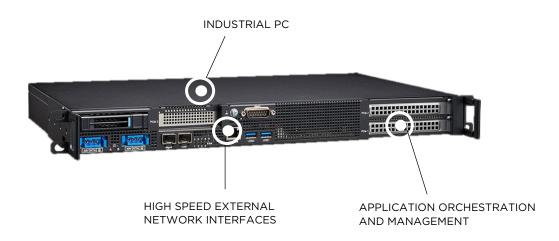
Reliable and Scalable
 Supports large number of users



ALL-IN-ONE 5G NETWORK



5G CORE AND EDGE COMPUTE



NOKIA 5G CORE

Installed Nokia 5G core provides software infrastructure to support high-speed, low latency communication and networking services.

Gigabit Ethernet and SFP+ interfaces facilitate highspeed communications with external networking equipment.

EDGE COMPUTE

Highly efficient, carrier-grade edge server with best-in-class Intel Xeon Scalable Processor.

Enterprises can create real-time, low latency, and high bandwidth cloud native applications by accessing radio network Edge Compute resources.

www.stengg.com digitalsystems@stengg.com

REMOTE RADIO UNIT

Highly versatile solutions suitable for deployment in locations requiring additional capacity or coverage. Micro remote radio heads (mRRH) are small and straightforward to deploy, which can accelerate network rollout.



Technical Specifications (AGIL 5G-in-a-Box)

PHYSICAL	
Enclosure	Ruggedised 19" Rack Case
Dimensions (mm)	760 (L) x 700 (B) x 360 (H)
Weight	60 kg

OPERATIONAL / ENVIRONMENTAL	
Temperature Range	-20°C to +55°C (operating) -40°C to +70°C (storage)
Environment Protection	IP66 (dust tight and protection against powerful water jets)
Humidity	10% - 80% RH with 29°C maximum dew point (operating) 5% - 95% RH with 33°C maximum dew point (storage)
GPS Synchronisation	Via external GPS Rx 1588v2 + SynchEth Synch chaining

	370 3370 KTT With 33 C Maximum dew point (storage)
GPS Synchronisation	Via external GPS Rx 1588v2 + SynchEth Synch chaining
CORE / EDGE COMPUTE	
Processor	3rd Gen Intel Xeon Scalable Processor, 24 Cores
RAM	128GB
Storage	1TB 2.5" SSD
5G Core	Nokia 5G NPN Core
Pre-installed OS / Applications	Ubuntu 22.04 FreeSwitch Software Defined Telco Stack (Comms Server)
INTERFACES	
Fronthaul Connections	SFP28
Backhaul Connections	SFP+; Gb Ethernet
Management	Web GUI Based Dashboard

www.stengg.com digitalsystems@stengg.com

POWER	
AC Input	220V AC
Power Consumption	600W (typical) 1.3kW (maximum)

Note: All specifications are subject to change without prior notice.

Technical Specifications (Remote Radio Unit, N78)

PHYSICAL	
Dimensions (mm)	270 (L) x 295 (B) x 130 (H)
Weight	~12kg (RRU+ radio antenna) < 1kg (GPS antenna)
OPERATIONAL / ENVIRONM	ENTAL
Regulatory	ETSI
Temperature Range	-40°C to +55°C (operating) -40°C to +70°C (storage)
Environment Protection	IP65 (dust tight and protection against water jets)
Humidity	5% - 95% (operating) 5% - 93% (storage)
RF PARAMETERS	
5G Band / Frequency*	N78, 3400 - 3600 MHz
RF Output Power	up to 10W per Tx path (4 Tx paths)
RF Bandwidth	100MHz OBW 200MHz IBW
Reference Sensitivity Power Level	-95.6 dBm
Carrier Bandwidth NR	20, 40, 50, 60, 80, 100MHz
Modulation	256QAM (DL), 64QAM (UL)
ANTENNA	
Configuration	4 Tx / 4 Rx (with Nex10 connectors)
Туре	Directional panel w/o beamforming
Nominal Gain	~10dBi
POWER	
Input Power	76 to 288V AC
Power Consumption	185W (typical) 264W (maximum)

^{*}N24, N25, N38, N41, N48, N77, N78, N79 RRUs also available.

Note: All specifications are subject to change without prior notice.

www.stengg.com digitalsystems@stengg.com

© 2023 ST Engineering Advanced Networks & Sensors Pte Ltd. All rights reserved.