

# NT-RTU-2023

Industrial Cellular Modem

2 ETH+ 1 RS232/RS485 + 1 DI + 1 DO



## INTRODUCTION

The Nimbus NT-RTU-2023 is Industrial Cellular Modem, versatile 4G Modem with dual Ethernet ports, dual SIM single standby capability and for simple internet and SMS function.

The NT-RTU-2023 runs on Linux based Operating System with standard of technical support and high reliability.

**Data-Guard** - Invaluable failsafe in case of a system failure and runaway data usage

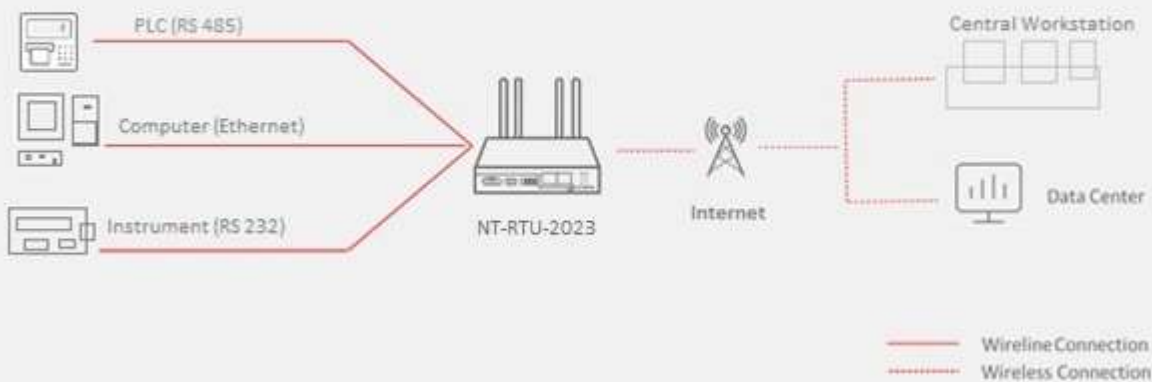
**Smart Reboot** - SMS tool to push roaming SIMs from a non-working to working state

**Smart Roaming** - Provides you with device-assisted intelligent network selection for roaming SIMs to improve performance and reduce risk.

## KEY FEATURES

- Dual-SIM for continuous cellular network connections.
- WAN – Static/DHCP Client
- Management and maintenance via SMS and Ethernet.
- Auto reboot via SMS/time schedule
- Industrial design (9 to 36 V DC, desktop or wall mounting or DIN rail mounting)

## APPLICATION EXAMPLE



## SPECIFICATIONS

### Cellular Interface

Number of antennas	2 (MAIN + AUX) or 1 (MAIN)
Connector	SMA-K
SIM	2 x Mini SIM, Single Module

### Ethernet Interface

Number of ports	2 x 10/100 Mbps, 2 x LAN or 1 x LAN + 1 x WAN
WAN port	Supports 802.3at PD feature (optional)
Magnet isolation protection	1.5 KV

### Wi-Fi Interface

Number of antennas	2 (Wi-Fi1 + Wi-Fi2)
Connector	RP-SMA-K
Standards	802.11 b/g/n, supporting AP and Client modes
Frequency bands	2.4 GHz
Security	WEP, WPA, WPA2
Encryption	64/128 AES, TKIP
Data speed	2 x 2 MIMO, 300 Mbps
Level	3.5 to 30V DC = HIGH, 0 to 1V DC = LOW
Absolute maximum VDC	30V DC (DI/DO)
Absolute maximum ADC	10mA (DI/DO)

### Serial Interface

Type	RS232 or RS485 (software configurable)
Connector	1 x 3-pin 3.5 mm female socket
Signal definition	RS232: TXD, RXD, GND RS485: A, B

### Others

Reset button	1 x RST
LED indicators	1 x RUN, 1 x MDM, 1 x WIFI, 3 x RSSI
Built-in	Watchdog, Timer

### Power Supply and Consumption

Connector	2-pin 3.5 mm female socket
Input voltage	9 ~ 36 V DC
Power consumption	Idle: 200 mA@12 V Data link: 580 mA (peak)@12 V

Remote management	Web, CLI, SMS
Serial port	Transparent, TCP Client/Server, UDP, Modbus RTU Gateway

Flash available for SDK	16 MB
RAM available for SDK	64 MB

### Physical Characteristics

Ingress protection	IP30
Housing & Weight	Metal, 350 g
Dimensions	127 x 82 x 30 mm
Installations	Desktop, wall mounting and 35 mm DIN rail mounting
Operating temperature	-35 ~ +75 °C
Storage temperature	-40 ~ +85 °C
Relative humidity	5% ~ 95%

### Regulatory and Type Approvals

Environmental	RoHS 2.0
EMI	EN 55032 Conducted Emission class B EN 55032 Radiated Emission class B
EMS	IEC 61000-4-2 (ESD) Level 4 IEC 61000-4-3 (RS) Level 2 IEC 61000-4-4 (EFT) Level 2 IEC 61000-4-5 (Surge) Level 2 IEC 61000-4-6 (CS) Level 2

## ORDERING INFORMATION

Model	PN	LTE Category	Frequency Bands*	Country/Region	Certification (*In progress)
NT-RTU-2023	NT2010P	Cat 4	4G: LTE FDD: B1/B3/B5/B8 LTE TDD: B34/B38/B39/B40/B41 3G: WCDMA: B1/B5/B8 2G: GSM: B3/B8	India	CCC*

\*For more information about frequency bands in India, please contact Nimbus sales representative.