

# NR-100

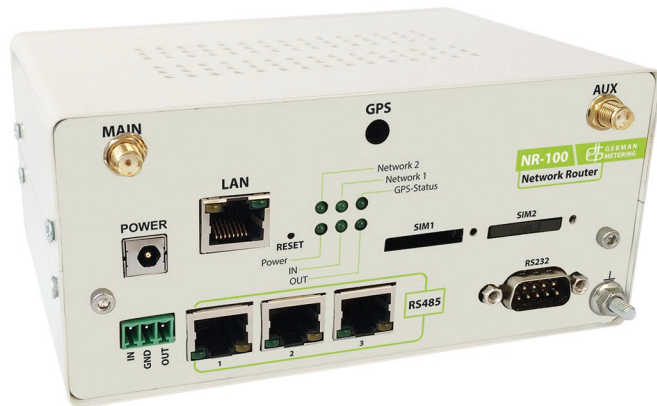
## Industrial Telecommunication Modem

### Overview

The NR-100 telecommunications modem is a device that uses LAN and mobile data communication platforms (2G / 3G / 4G) to read and remotely configure all equipment that has RS232 and RS485 communication ports through Provides relevant software. This device can be used in centers such as power transmission centers, post stations and meteorological stations, and its installation is in the form of indoor and in different directions. This device is designed in two models, N and S. The NR-100-N has four RS485 ports and the NR-100-S has three RS485 ports and one RS232 port.

### Features

- ▶ Stable connection with different equipment
- ▶ Fast reading and data transfer speed (2x10/100/1000 Mb/s)
- ▶ Communicate with 30 devices (with each device bus)
- ▶ Compatible with electromagnetic noisy environment
- ▶ Remove blind spots from posts using external antennas
- ▶ Replace the SIM card without opening the device
- ▶ Information storage space
- ▶ Data Encryption and Communication Monitoring (IPsec)
- ▶ Work with the APN operator's dedicated network
- ▶ Configure via the web environment
- ▶ Determine different access levels
- ▶ Central management software for configuring equipment collectively
- ▶ Provide GPRS communication platform with 2G/3G/4G coverage
- ▶ It has 2 SIM cards with failover function
- ▶ Update the device app remotely
- ▶ Reset the device remotely



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## Technical Specifications

Standard industrial hardware	
Linux operating system	
Transfer your FAN information bus as TRANSPARENT to the center to automatically adjust the equipment through the manufacturer's software (remotely)	
Connect one device to several devices via RS485 bus (maximum 30 devices on each bus)	
Ability to connect directly to city electricity (AC) and DC electricity	
Ability to install on rails in one direction	
External antenna with portability	
Encrypt data while sent and received between device and server for information security according to relevant standards	
Firewall structure to control all incoming and outgoing communications from the communication platform	
Prevent DOS attacks	
Ability to connect to serial and Ethernet equipment by establishing a VPN in the telecommunication network	
GRE Tunnel capability	
Configure equipment with SSH protocol	
Hardware reset capability	
Ability to add GPS	
Ability to add USB port	
Communication ports	NR-100-N: RS485 x 4, NR-100-S: RS485 x 3 + RS232 x 1 An Ethernet port GPRS platform with 2G / 3G / 4G coverage 1 digital output port with command to local relay 1 digital input port (disconnected keys detection)
Protocol support	SNMP SYSLOG TCP Server mode IKEv2 / IKEV3
Advanced security services	IPSEC StateFull Firewall

## General specifications

Power supply conditions	12VDC, 2A
Storage temperature	40- to +70
Operating temperature	25 to + 65
Performance humidity	0 to 95%
Dimensions	150x100x70mm (height * width * length)
Weight	477 gr
GSM module	FDD LTE: B1/B3/B5/B7/B8/B20 WCDMA: B1/B5/B8 GSM: 900/1800

## Standards

ESD	IEC61000-4-2
EFT/B immunity	IEC61000-4-4

## Product models

Model	NR-100-N	NR-100-S
Main Antenna	✓	✓
AUX (Extra Antenna)	✓	✓
GPS	optional	optional
LAN	✓	✓
Digital Input	✓	✓
Digital Output	✓	✓
RS485	x 4	x 3
RS-232	-	x 1
SIM Card	x 2	x 2