NK R400

5G RedCap Industrial Router | Qualcomm SDX35 Platform

The NK R400 is a compact, cost-efficient 5G RedCap (NR-Light) industrial router built on the Qualcomm SDX35 platform. Designed for IoT gateways, remote monitoring, digital signage, and edge connectivity deployments, it delivers reduced-capability 5G performance with full LTE fallback in a low-power, small-footprint chassis.

5G RedCap trades peak throughput for lower module cost, reduced power draw, and simpler antenna design — making the R400 well suited for high-volume, cost-sensitive IoT and M2M deployments that don't require eMBB-class bandwidth.

KEY FEATURES

- Qualcomm SDX35 5G RedCap (3GPP Release 17 NR-Light) modem with integrated LTE-A fallback
- Broad global band support across 5G Sub-6 and LTE FDD/TDD — one platform for multi-region deployment
- **U.S. CBRS band n48 support for private/shared spectrum deployments**
- Compact industrial-grade aluminum enclosure, external MIMO antennas, wide operating temperature range
- Linux-based embedded OS with OpenWrt support; TR-069/ACS-ready for remote fleet management
- Optional RS-485 serial interface for industrial/SCADA device integration

CELLULAR PERFORMANCE

Chipset	Qualcomm SDX35 — 5G RedCap (NR-Light), 3GPP Release 17
5G RedCap Speed	DL: up to 220 Mbps typical, UL: up to 100 Mbps typical (module/network dependent)
LTE Fallback Speed	LTE-A: DL/UL rates per carrier aggregation and network configuration
SIM	1x Nano-SIM (3V/1.8V); eSIM configuration available on request

5G NR Bands (n=26 bands)

n1, n2, n3, n5, n7, n8, n12, n13, n14, n18, n20, n25, n26, n28, n30, n38, n40, n41, n48*, n53, n66, n70, n71, n77, n78, n79

LTE Bands (28 bands)

B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B30, B34, B38, B39, B40, B41, B42, B43, B48*, B66, B71

**n48 / B48 = U.S. CBRS (3550–3700 MHz), enabling private and shared spectrum deployments where licensed.*

WI-FI

Standard	802.11b/g/n, 2.4 GHz, 2T2R (optional)
Speed	Up to 300 Mbps

INTERFACES & I/O

Ethernet	2 or 5 x 10/100 Mbps LAN ports, Auto MDI/MDIX (order-configurable)
SIM	1x Nano-SIM card interface (3V/1.8V)

Power Input	12 VDC, 5.5 x 2.1 mm barrel connector with interlock power jack
Cellular Antenna	2x external SMA, 5G/LTE MIMO
Wi-Fi Antenna	2x external SMA, 2T2R (optional)
Console	1x TTL console port (onboard)
Serial	1x RS-485 terminal block (optional) — for industrial/serial device integration (e.g. solar controllers, PLCs)
Reset	1x hardware System Reset button

STATUS INDICATORS

LEDs	Power, Wi-Fi status, 5G/LTE status, LAN Link/Act, Signal strength

Rear panel: LAN/WAN ports, power input, and external antenna connectors

EMBEDDED SYSTEM & SOFTWARE

OS	Embedded Linux; supports OpenWrt
Multi-User	Concurrent multi-user routing support
Protocols	TCP, FTP, PPTP, HTTP, HTTPS, TFTP, DHCP, NAT, IPSec Pass-through, ICMP, IGMP, RIPv2, RIP, OSPF, SNMP, RMON, QoS
Optional	VPN client/gateway, IPSec client
Remote Management	TR-069/CWMP ACS-ready for zero-touch provisioning and fleet management

PHYSICAL & ENVIRONMENTAL

Dimensions	120 mm x 78 mm x 29 mm
Weight	~0.3 kg
Operating Temperature	-20°C to +70°C
Enclosure	Industrial-grade aluminum housing

ORDERING INFORMATION

NK R400-C	2-port configuration — 1x WAN, 1x LAN
NK R400-D	5-port configuration — 1x WAN, 4x LAN

Certification (FCC / CE / IC): pending — contact NetKonnekt for current certification status by region.

Contact NetKonnekt LLC

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Specifications subject to change without notice. Performance figures are typical/module-rated values and may vary based on network conditions, carrier configuration, and final certification.