

OnCell 5004/5104

Industrial quad-band GSM/GPRS routers



OnCell 5004



OnCell 5104

- > Universal quad-band GSM/GPRS 850/900/1800/1900 MHz
- > GuaranLink and dual SIM redundancy for continuous cellular connections
- > Connect to 4 10/100BaseT(X) devices over an integrated VPN
- > Centralize private IP management with OnCell Central Manager
- > DIN-Rail and wall mountable housing
- > 2 digital inputs and 1 relay output (OnCell 5104 only)



Overview

The OnCell 5004/5104 are high-performance industrial grade cellular routers that allow up to 4 Ethernet-based devices to simultaneously use a single cellular data account for primary or backup network connectivity to remote sites and devices. Both products provide the functionality of a cellular router, firewall, and switch in one device. To ensure zero data lose and on-demand cellular communication, OnCell 5004/5104 are integrated with GuaranLink function. The difference between the OnCell 5004 and OnCell 5104 is that the OnCell 5104

comes with a built-in relay output that can be configured to indicate the priority of events when notifying or warning engineers in the field, and the two digital inputs allow you to connect basic I/O devices, such as sensors, to the cellular network. The OnCell 5004 can be placed on a desktop or wall-mounted, whereas the OnCell 5104 has an IA design and can be attached to a DIN-rail. Both products use 12 to 48 VDC power inputs with a screw-on design for greater reliability, and the Ethernet ports come with 1.5 KV magnetic isolation protection to keep your system safe from unexpected electrical discharges.

Specifications

Cellular Interface

Standards: GSM/GPRS
Band Options: Quad-band 850/900 and 1800/1900 MHz
GPRS Multi-slot Class: Class 10
GPRS Terminal Device Class: Class B
GPRS Coding Schemes: CS1 to CS4
Tx Power: 1 watt GSM 1800/1900, 2 watts EGSM 850/900

WAN Interface

Number of Ports: 1
Ethernet: 10/100 Mbps, RJ45 connector, Auto MDI/MDIX
Magnetic Isolation Protection: 1.5 KV built-in

LAN Interface

Number of Ports: 4
Ethernet: 10/100 Mbps, RJ45 connector, auto MDI/MDIX
Magnetic Isolation Protection: 1.5 KV built-in

SIM Interface

Number of SIMs: 2
SIM Control: 3 V

I/O Interface (OnCell 5104 only)

Alarm Contact: 1 relay output with current carrying capacity of 1 A @ 24 VDC
Digital Inputs: 2 electrically isolated inputs
 • +13 to +30 V for state "1" (On)
 • +3 to -30 V for state "0" (Off)

Software

Network Protocols: UDP/TCP, SNMP, ICMP, DDNS, DHCP/BOOTP, PPPoE, PPP, DNS Relay, HTTPS, Telnet, IPsec
Router/Firewall: NAT, port forwarding, routing
Authentication: Local user-name and password
Security: IP filtering

Management Software

OnCell Central Manager: Centralized management solution for accessing private IPs from the Internet

Physical Characteristics

Housing: Aluminum, providing IP30 protection
Weight:

OnCell 5004: 505±5 g
 OnCell 5104: 645±5 g

Dimensions:

OnCell 5004: 158 x 103 x 35 mm (6.22 x 4.06 x 1.38 in)
 OnCell 5104: 135 x 103 x 50.8 mm (5.315 x 4.06 x 2.000 in)

Environmental Limits

Operating Temperature: -30 to 55°C (-22 to 131°F)
Storage Temperature: -40 to 75°C (-40 to 167°F)
Ambient Relative Humidity: 5 to 95% (30°C, non-condensing)

Power Requirements

Number of Power Inputs: 1 terminal block, 1 power jack
Input Voltage: 12 to 48 VDC
Power Consumption:
 OnCell 5004: 12 to 48 VDC, 900 mA (max.)
 OnCell 5104: 12 to 48 VDC, 950 mA (max.)

Standards and Certifications

Safety: UL 60950-1

EMC: EN 55022 Class A, EN 55024, FCC Part 15 Subpart B Class A

Radio: FCC Part 22H, FCC Part 24E, EN 301 489-1, EN 301 489-7, EN 301 511

Reliability

MTBF (mean time between failures):

OnCell 5004: 352,000 hrs

OnCell 5104: 480,000 hrs

Warranty

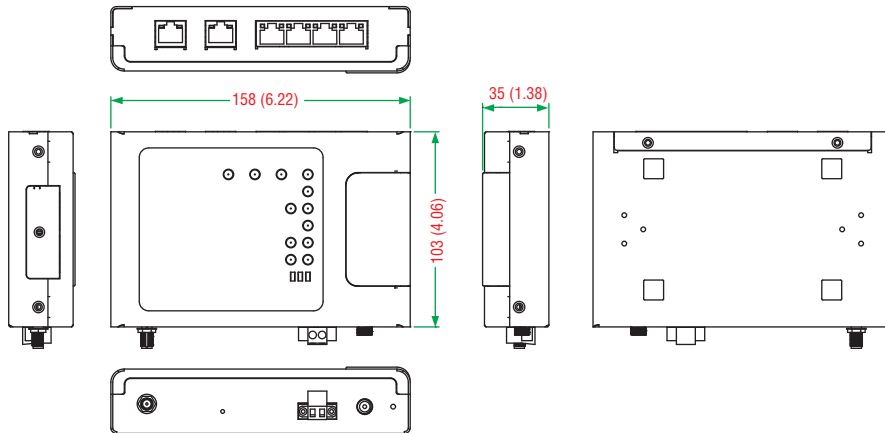
Warranty Period: 5 years

Details: See www.moxa.com/warranty

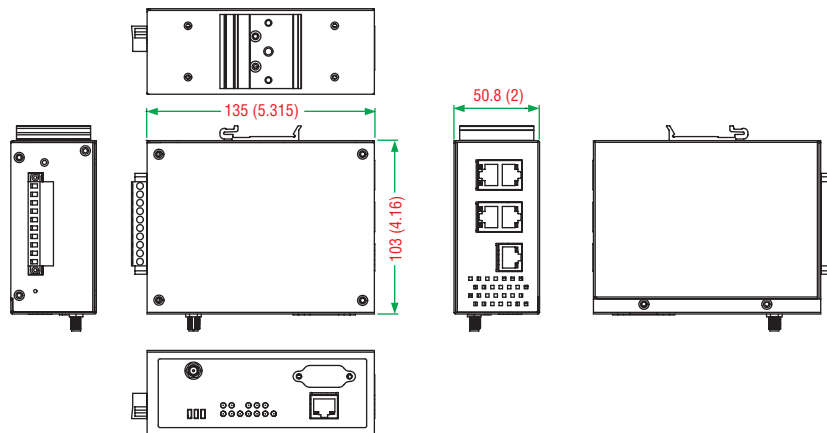
Dimensions

Unit: mm (inch)

OnCell 5004



OnCell 5104



Ordering Information

Available Models

OnCell 5004: 4-port 10/100M Ethernet to GSM/GPRS cellular router

OnCell 5104: 4-port 10/100M Ethernet to GSM/GPRS cellular router, IA design

Note: Please visit Moxa's website for a complete list of optional wireless accessories and antennas available for Moxa's wireless products.

Package Checklist

- OnCell cellular router
- Rubber SMA antenna
- Rubber stand (OnCell 5004 only)
- Wallmount kit (OnCell 5004 only)
- DIN-Rail kit (OnCell 5104 only)
- Documentation and software CD
- Quick installation guide (printed)
- Warranty card