robustOS

R2111

Industrial Ethernet Router
5 x Ethernet



INTRODUCTION

The Robustel R2111 industrial multi-port router features five gigabit Ethernet ports to accommodate diverse networking requirements in Internet of Things (IoT) applications.

The R2111 utilizes a proven high-performance CPU platform and **RobustOS**, a mature and stable operating system developed in-house by Robustel.

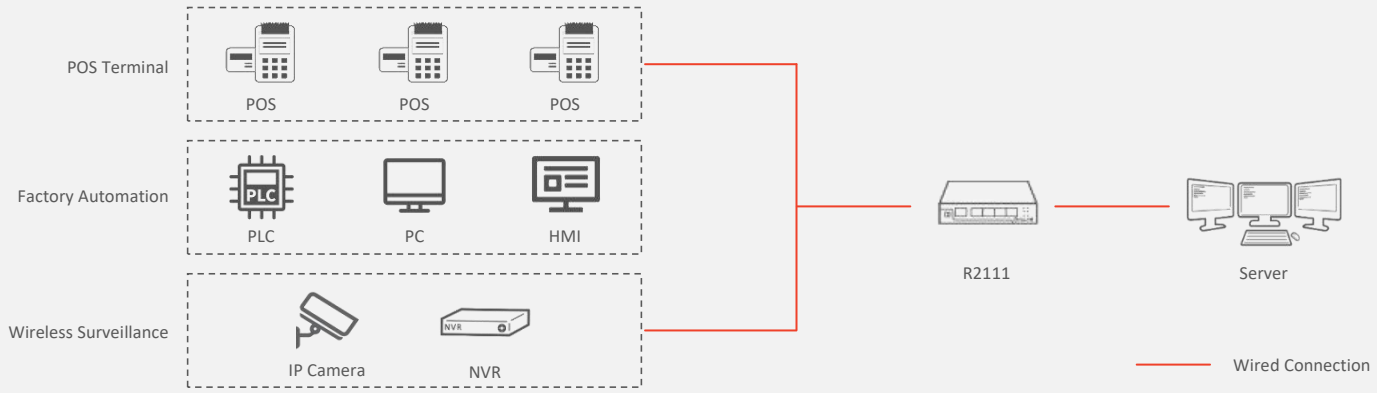
The **Robustel Cloud Manager Service (RCMS)** is a unified cloud-based platform designed for real-time monitoring and centralized management of industrial IoT devices. Fully compatible with Robustel routers and gateways, RCMS delivers an interactive geospatial dashboard that enables users to visualize device locations and track critical metrics such as data usage, signal strength, and network status. To ensure seamless operations, the platform facilitates over-the-air (OTA) updates for firmware, configurations, and applications, minimizing downtime while optimizing system performance. Experience robust, cloud-native device management by registering at: https://rcms-cloud.robustel.net

robustel RCMS CLOUD

KEY FEATURES

- Five Ethernet ports rated at 10/100/1000 Mbps
- Supports ICMP probing
- Configurable for Static IP and DHCP Client for the WAN port
- Features RobustOS, along with an SDK and various applications
- Supports DHCP Server
- Enables IP Passthrough
- Firmware upgrades can be performed via Web interface and RCMS
- The RCMS cloud platform providing simple and secure remote access for PLCs and other industrial equipment
- RCMS serves as a centralized M2M management platform capable of real-time monitoring of device network status and traffic analysis
- Robust industrial design with a 12-36 V DC input voltage option, supporting horizontal desktop placement, wall mounting, or DIN rail mounting

APPLICATION EXAMPLE



SPECIFICATIONS

Hardware System

CPU	Dual-core MIPS, 880 MHz
RAM	256 MB
Flash	32 MB

Ethernet Port

Number of ports	5 x 10/100/1000 Mbps
	5 x LAN by default, can be configured as 1 x WAN + 4 x LAN
Magnet isolation protection	1.5 KV

Others

Reset button	1 x RST
LED indicators	1 x RUN, 1 x USR
Watchdog	External

Power Supply and Consumption

Connector	2-pin 3.5 mm female socket
Input voltage	12/24 V DC, 12 ~ 36 V DC
	Reverse polarity protection, surge protection
Power consumption	Idle: 1.5 W@12 V
	Max: 6.5 W@12 V
Recommended power supply	12 V DC/1.0 A power adapter

Physical Characteristics

Ingress protection	IP30
Housing & Weight	Metal, 309 g
Dimensions	29.5 x 81.8 x 127.2 mm
Installations	Desktop, wall mounting and 35 mm DIN rail mounting
Operating temperature	-20 ~ +55 °C (normal operation)
	-25 ~ +70 °C (extended operation)
Storage temperature	-40 ~ +85 °C
Relative humidity	5 ~ 95% RH (non-condensing)

Software (Basic features of RobustOS)

Network protocols	TCP, UDP, DHCP, ICMP, NAT, HTTP, DNS, NTP, SMTP, Telnet, VLAN, HTTPs, ARP, SSH2, DDNS, etc.
Firewalls	DMZ, anti-DoS, Filtering (IP/Domain name/MAC address), Port Mapping, Access Control
Remote management	Web, CLI

SDK

Supported programming languages	C, C++
Flash available for SDK	128 MB
RAM available for SDK	5 MB

App Center (Available Apps for RobustOS)

Apps*	L2TP, PPTP, DMVPN, VRRP, QoS, SNMP, Language, RCMS, Edge2Cloud

**Request on demand. For more Apps please visit www.robustel.com.*

Cloud Platform

Robustel Cloud Manager Service (RCMS)	RobustLink, RobustVPN, Operation Console

Regulatory and Type Approvals

Environmental	RoHS2.0
Testing	IEC 60068-2-6 (Sinusoidal Vibration)
	IEC 60068-2-27 (Anti-Shock)
	IEC 60068-2-64 (Random Vibration)
EMI	EN 55032 Conducted Emission Class B
	EN 55032 Radiated Emission Class B
EMS	EN 61000-4-2 (ESD) Level 3
	EN 61000-4-3 (RS) Level 2
	EN 61000-4-4 (EFT) Level 2
	EN 61000-4-5 (Surge) Level 3, AC Mains Power Port Level 2, Signal Ports
	EN 61000-4-6 (CS) Level 3
	EN 61000-4-11 (Dips) Class 2

ORDERING INFORMATION

Model	Order Code	Frequency Bands*	Country /Region	Certification	Package Contains
R2111-A-NU	A014000008	-	EMEA	CE, FCC	1 x R2111 Router (B Code: B014000003)

**For more information about frequency bands in different countries, please contact your Robustel sales representative.*

Email: info@robustel.com
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