

Product details

Technical Datasheet

1. Product Overview

The Industrial Cyber Security Gateway is a **high-performance embedded network security appliance** designed to provide **advanced threat protection, secure data transmission, and network traffic control** in industrial and enterprise environments.

The system is engineered to operate as a **secure bridge between external networks (WAN) and internal infrastructure (LAN/OT systems)**, enabling **real-time monitoring, filtering, and protection against cyber threats**.

2. Hardware Specifications

Parameter	Model A
Processor	Intel Celeron 6412
RAM	8 GB DDR
Storage	256 GB SSD
Wireless	Dual Band WiFi (2.4 GHz / 5 GHz)
LAN Ports	Multiple RJ45 Gigabit Ports
Serial Interface	Available
SFP Port	Optional
Form Factor	Industrial Fanless

3. Network & Security Features

3.1 Advanced Threat Management

- Domain Filtering and Blocking
- URL Categorization and Filtering
- Keyword-based Traffic Control
- IP Address Blocking
- Port-level Access Control
- MAC Address Filtering
- File Attachment Scanning
- Email Content Inspection
- Extension-based File Blocking

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3.2 Gateway Protection Mechanisms

- MAC Flooding Protection
 - IP Spoofing Detection
 - ARP Spoofing Prevention
 - ICMP Attack Protection
 - IP Fragmentation Attack Handling
 - DHCP Attack Protection
 - Host Scanning Detection
 - Port Scanning Detection
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3.3 Network Security Capabilities

- Stateful Firewall Protection
 - VPN (Virtual Private Network) Support
 - Secure Data Routing and Traffic Inspection
 - Inbound and Outbound Traffic Filtering
 - Network Segmentation Support
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4. Software & Control System

The system is equipped with a **secure embedded software platform** providing:

- Real-time monitoring dashboard
 - Configurable security policies
 - User access control and authentication
 - Data logging and event tracking
 - Alert and notification system
 - Remote configuration and management
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5. Environmental & Compliance Specifications

5.1 Operating Conditions

Parameter	Specification
Operating Temperature	-20°C to +70°C
Storage Temperature	-20°C to +85°C
Humidity	10% to 90% RH (Non-condensing)

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5.2 Mechanical & Environmental Compliance

- Fanless Industrial Design
 - High Temperature Endurance (Up to 70°C continuous operation)
 - Shock Resistance: 15g, 11 ms (as per IS 9000)
 - Vibration Resistance: 10–55 Hz sweep (IS 9000 compliant)
 - Dust Protection: IP65 (IEC 60529)
 - Salt Spray Resistance: 96 hours (IS 10250 compliant)
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6. Industrial Design Features

- Rugged metal enclosure for harsh environments
- Passive cooling (fanless architecture)
- Compact form factor for panel or rack mounting
- High reliability for 24×7 continuous operation

(As shown in product images on page 5 of datasheet)

7. Applications

- Industrial automation systems
 - Smart manufacturing plants
 - Power utilities and smart grids
 - Solar and wind energy plants
 - IoT and edge computing networks
 - Banking and financial networks
 - Educational institutions
 - EV charging infrastructure
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8. Key Advantages

- Industrial-grade cybersecurity protection
 - Real-time threat detection and mitigation
 - Secure OT–IT integration
 - Scalable architecture for enterprise deployment
 - Low maintenance with fanless design
 - High reliability in harsh environments
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9. Compliance & Standards

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- IEC 60529 (Ingress Protection – IP65)
- IS 9000 (Shock & Vibration)
- IS 10250 (Salt Spray Test)
- Industrial Environmental Compliance Standards

10. Competitive Advantages

Feature	This Solution	Typical Firewall
Industrial Design	✓ Yes	✗ Limited
OT + IT Protection	✓ Integrated	✗ Mostly IT
Customization	✓ High	✗ Low
ESG Alignment	✓ Yes	✗ No
Deployment Speed	✓ Fast	✗ Moderate

11. Conclusion

The Industrial Cyber Security Gateway provides a **robust, scalable, and secure networking solution** for modern industrial and enterprise environments, ensuring **data integrity, operational continuity, and protection against evolving cyber threats**.

