

Endian 4i Edge X

Edge Computing - Zukunft industrieller Sicherheit



-  **OPC UA** ✓
-  **MQTT** ✓
-  **Modbus** ✓
- SIEMENS S7** ✓
- und weitere ✓

Die leistungsstarke Lösung für das industrielle Internet der Dinge: Mit Edge Computing und Container-Technologie (Docker) lassen sich Industrie- und Unternehmensanwendungen in jeder Niederlassung betreiben. Das spart Bandbreite und verringert die Latenzzeiten. Durch eine Datenverarbeitung im Gateway werden weniger Unternehmensdaten über das Internet übertragen – ein wichtiger Beitrag für mehr Sicherheit.

Das Endian 4i Edge X erfüllt alle Anforderungen an industrielle Sicherheit und Konnektivität mit einer breiten Palette an Konnektivitätsoptionen wie Ethernet oder 4G. Gleichzeitig lässt sich das Gerät als WiFi-Client einsetzen. Damit eignet sich die Endian 4i Edge X perfekt für jede Umgebung und jedes Netzwerk.

Highlights

- ✓ Einfacher und sicherer VPN-Zugang
- ✓ 3 Gigabit Ethernet Ports
- ✓ Unterstützt 4G Modul (internal)
- ✓ WiFi Client (uplink)
- ✓ Serial over IP
- ✓ Edge Computing (Docker)
- ✓ 0°C bis +60°C Betriebstemperatur



Performance	4i Edge X
Firewall Durchsatz	3 Gbit/s
VPN Durchsatz	250 Mbit/s
IPS Durchsatz	300 Mbit/s
Parallele Sessions	300.000

Hardware	4i Edge X
CPU/SoC	Intel Celeron N3350 Dual-Core
CPU Speed	2.4 Ghz
Power 9-24 V	Netzteil separat erhältlich
Case / Form Factor	DIN Rail (Optional) / Wall Mount / Desktop
Maße	115 x 115 x 44 mm
Gewicht	850 g
Lüfterlos	Yes
Status LED	Yes
Betriebstemperatur	0°C – +60°C/32°F – +140°F
Lagertemperatur	-40°C – +80°C/-40°F – +176°F
Luftfeuchtigkeit	0% ~ 90% relative humidity, non-condensing
Serial Port	RS232/422/485
Digital I/O	4In / 40Out
Ethernet Ports	3 x GbE (Intel i211)
WiFi	802.11ac
3G / 4G	Optional
RAM	2 GB
Onboard Speicher	16 GB
Zusatz Speicher	MicroSD Slot
USB Ports	2 x USB 3.0
Console Port	1 x Micro-USB Console Port

Endian 4i Edge X

Network Security

- Stateful Packet Firewall
- Application Control (over 160 Protocols including Facebook, Twitter, Skype, WhatsApp and more)
- Demilitarized Zone (DMZ)
- Intrusion Detection and Prevention (Snort)
- Multiple Public IP Addresses
- Multiple WAN
- Quality of Service and Bandwidth Management
- SNMP Support
- VoIP/SIP Support
- SYN/ICMP Flood Protection
- VLAN Support (IEEE 802.1Q Trunking)
- DNS Proxy/Routing
- Anti-Spyware
- Phishing Protection

WAN Failover

- Automatic WAN Uplink Failover
- Monitoring of WAN Uplinks
- Uplink Types: Ethernet (Static/DHCP), PPPoE, PPTP, WiFi 802.11abgn/ac
- Support for UMTS/GPRS/3G USB Dongles

Network Address Translation

- Destination NAT
- Incoming Routed Traffic
- One-to-One NAT
- Source NAT (SNAT)
- IPsec NAT Traversal

Routing

- Static Routes
- Source-Based Routing
- Destination-Based Routing
- Policy-Based Routing (Based on Interface, MAC Address, Protocol or Port)

Bridging

- Firewall Stealth Mode
- OSI Layer 2 Firewall Functionality
- Spanning Tree
- Unlimited Interfaces per Bridge

High Availability

- Hot Standby (Active/Passive)
- Node Data/Configuration Synchronization

Virtual Private Networking

IPsec

- Encryption: Null, 3DES, CAST-128, AES 128/192/256-bit,
- Blowfish 128/192/256-bit, Twofish 128/192/256-bit,
- Serpent 128/192/256-bit, Camellia 128/192/256-bit
- Hash Algorithms: MD5, SHA1, SHA2 256/384/512-bit, AES-XCBC
- Diffie Hellman Modes: 1, 2, 5, 14, 15, 16, 17, 18, 22, 23, 24
- Authentication: Pre-Shared Key (PSK), RSA Keys, X.509 Certificates
- IKEv1 & IKEv2
- Dead Peer Detection (DPD)
- NAT Traversal
- Compression
- Perfect Forward Secrecy (PFS)
- VPN Site-to-Site
- VPN Client-to-Site (Roadwarrior)
- L2TP User Authentication
- XAuth User Authentication

OpenVPN

- True SSL/TLS VPN
- Encryption: DES, 3DES, AES 128/192/256-bit, CAST5, Blowfish
- Authentication: Pre-Shared Key, X.509 Certificates
- Support for VPN over HTTPS Proxy (OpenVPN)
- PPTP Passthrough
- VPN Client-to-Site (Roadwarrior)
- VPN Client for Microsoft Windows, Mac OS X and Linux
- Possibility of Multiple Logins per User
- VPN Failover
- Multiple Server Support Scalability
- Support for Mobile Devices (Android, iOS)

User Management & Authentication

- Unified User Management for OpenVPN, L2TP, XAuth
- Group Management
- Integrated Certificate Authority
- External Certificate Authority Support
- User Password and Certificate Management (Two-factor Authentication)
- Multiple Authentication Servers (Local, LDAP, Active Directory)

Serial Communication

- Serial over IP
- Serial-to-Serial Hardware Bridging
- Support for RS232, RS422, RS485

Event Management

- More Than 30 Individually Configurable Events
- Email Notifications
- SMS Notifications
- Powerful Python Scripting Engine

Extra Services

- NTP (Network Time Protocol)
- DHCP Server
- SNMP Server
- Dynamic DNS

Logging and Reporting

- Reporting Dashboard
- Detailed System and Attack Reports
- Live Network Traffic Monitoring (powered by ntopng)
- Live Log Viewer
- Network/System/Performance Statistics
- Rule-Based Logging Settings (Firewall Rules)
- Syslog: Local or Remote
- OpenTSA Trusted Timestamping

Management / GUI

- Easy Web-Based Administration (SSL)
- Multi-Language Web-Interface (English, Italian, German, Japanese, Spanish, Portuguese, Turkish, Chinese, Russian)
- Secure Remote SSH/SCP Access
- Serial Console
- Centralized Management through Endian Network (SSL)

Updates and Backups

- Scheduled Automatic Backups
- Encrypted Backups via E-mail
- Instant Recovery / Backup to USB Stick (Endian Recovery Key)
- Centralized Updates through Endian Network

Endian Connect Platform

Die Zukunft der IoT-Sicherheit und Konnektivität

Endian Connect Platform ist die einzige offene End-to-End-Plattform, die eine sichere Remote-Konnektivität zwischen Personen, Geräten, Prozessen und Netzwerken bietet. Unsere Lösung ist maximal skalierbar. Damit ist sie für den Einsatz in kleinen Projekten genauso geeignet wie in sehr großen, globalen Anwendungen mit Tausenden, oder gar Millionen von verbundenen Geräten.

