



wienet

INDUSTRIAL **AUTOMATION**

Easy remote access to machines and systems,
machine data collection and machine operation.

HELLO WIELAND ELECTRIC

Tradition and innovation - Wieland is representing the synergy of these two guiding principles for more than 100 years.

At Wieland Electric, we are proud to be the world market leader in electrical connections, and have been focusing on safe and innovative technologies since our founding. The beginnings of our success lie in the legendary Wieland Clamp, the first-ever safe electrical connector. Since then, innovation has pushed us to develop safer and more efficient ways to electrify the world.

Expanding from a component-only manufacturer, we are now one of the leading suppliers of innovative, future-oriented, and complete electrical solutions. We divide our focus into two main areas, Building and Industry. Our Building Solutions focus on decentralized power distribution and pluggable connections in all kinds of architectures and infrastructures. From in-store displays and lighting to hospitals and airports, and any structure in between – you build it, we power it! Our Industry Solutions center around functional safety for machines, industrial networking, and power distribution.

At Wieland, we keep your productivity going in mechanical engineering, wind power, material handling, HVAC, and many other industries.

We are at our customers' side in every step of the project, right from the start. Our experts offer consulting, on-site services, and technical support. We see ourselves as service providers, trainers and subject-matter experts.



1910

Founded in
Bamberg



1700+

Employees
worldwide



3

Production
sites



70+

Countries
worldwide

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READY FOR **DIGITISATION** – SECURE CONNECTION TO THE INTERNET.

The global deployment of machines makes worldwide communication with machines more and more important to avoid costly service work on site. In addition, modern production technology requires networks that are able to exchange data between a wide variety of processes and machines. With the communication solutions from Wieland Electric, you lay the foundation for this, enabling remote access to your automation devices at any time, no matter where you are.

Today it is essential to collect machine and system data in order to be able to be competitive in the market. Only this makes predictive maintenance possible and ensures you can continuously improve your machines and systems. Our wienet IoT solutions put you in the position to do this. On site and the operating HMI provide best control, directly at the source of the data.

PRODUCTS FOR:

- + MACHINE BUILDING
- + WATER AND WASTE
WATER MANAGEMENT
- + PROCESS INDUSTRY
- + BUILDING AUTOMATION
- + E-MOBILITY
- + TRAFFIC INFRA-
STRUCTURE
- + VIDEO MONITORING
- + SMART GRID
- + WIND POWER PLANTS
- + CHARGING STATIONS





AUTOMATION SOLUTIONS FOR YOUR MACHINES + PLANTS.



VPN-ROUTERS

When remote access to your machines and plants is required, encrypted VPN connections are the answer.

Security VPN routers enable secure and encrypted remote access to all devices in your machine network.

The VPN portal WIE-Service24 is the command center for this and manages all your VPN connections.



MACHINE OPERATION USING HMI

Touch panels are today used in many machines and systems for the visualization, operation, and diagnosis. By transferring the user habits from the consumer world into the automation world, the HMI ECO series has been especially developed for industrial requirements and needs. Make the machine the flagship of your company with your own logo on the operating unit.



SWITCHES

Reliable and highly available machine communication is the basis for the reliable operation of your machine. Choose unmanaged switches to simply network devices, protocol switches for the integration into your automation environment or fully managed switches for full control in the network.

For further information on this topic, we recommend the reference on page 39 to our catalog wienet Switches - Securely networked, order no. 0801.1



WIENET SECURITY ROUTER

INDUSTRIAL MOBILE ROUTER **WR-LTE V3**



Type	Art. No.
wienet WR-LTE v3 SL	83.041.0700.1
wienet WR-LTE v3 SL 5-port	83.041.0709.1
wienet WR-LTE v3 SL 5-port WIFI	83.041.0769.1

INDUSTRIAL MOBILE ROUTER **4G LTE V2**



Type	Art. No.
wienet LTE LR240 EMEA	83.041.0240.1

INDUSTRIAL LAN ROUTER **WR-LAN**



Type	Art. No.
wienet WR-LAN v3 SL 5-port	83.041.0809.1
wienet WR-LAN v3 SL 5-port WIFI	83.041.0869.1

Interfaces	Antenna ports	Dimensions W x H x D (mm)
2x LAN, USB, 2DI, 1DO, 2x SIM	ANT, DIV, GPS	55 x 125 x 97
5x LAN, USB, 2DI, 1DO, 2x SIM	ANT, DIV, GPS	55 x 125 x 97
5x LAN, USB, 2DI, 1DO, 2x SIM, WIFI	ANT, DIV, GPS, WIFI	55 x 125 x 97

Interfaces	Antenna ports	Dimensions W x H x D (mm)
2x LAN, DI, DO, RS232, RS485, 2x SIM	ANT, DIV	25 x 125 x 95

Interfaces	Antenna ports	Dimensions W x H x D (mm)
5x LAN, USB, DI, DO	-	55 x 125 x 97
5x LAN, USB, DI, DO, WIFI	WIFI	55 x 125 x 97

WIENET VPN

VPN LICENSES



Type	Art. No.
wienet VPN V3 - single VPN license	ZD.000.0020.5
wienet VPN V3 - 10 VPN licenses	ZD.000.0021.5
wienet VPN V3 - 25 VPN licenses	ZD.000.0022.5
wienet VPN V3 - 50 VPN licenses	ZD.000.0023.5
wienet VPN V3 - 100 VPN licenses	ZD.000.0024.5

WIENET HMI ECO TOUCH PANELS



Type	Art. No.
HMI -ECO-043	83.050.0000.0
HMI -ECO-070	83.050.0001.0
HMI -ECO-100	83.050.0002.0
HMI -ECO-120	83.050.0003.0
HMI -ECO-150	83.050.0004.0

ACCESSORIES

Type	Art. No.
HMI -LICENSE-SINGLE	ZW.000.0170.0
SP-CABLE-ETH1	R1.190.1020.0

Service description

VPN client single license for router, IoT gateway, PC or mobile device
10 VPN client licenses for router, IoT gateway, PC or mobile device
25 VPN client licenses for router, IoT gateway, PC or mobile device
50 VPN client licenses for router, IoT gateway, PC or mobile device
100 VPN client licenses for router, IoT gateway, PC or mobile device

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Monitor size in inch

Resolution in pixels

Dimensions W x H x D (mm)

4.3	480 x 272	129 x 103 x 33
7	800 x 480	203.5 x 148 x 37
10	1024 x 600	270.8 x 212.8 x 42.5
12	1024 x 768	335.4 x 245.8 x 58.2
15	1024 x 768	399.1 x 267.6 x 57.5

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Description

Single-user license for hmi PLAN programming software
Ethernet programming cable, 2 m

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ACCESSORIES



Type	Art. No.
MPI-ETH ADAPTER ACCON-NETLINK-PRO	F0.000.0031.8
wienet ANTENNA 15863V2 ROOF ANT.	F0.000.0035.1
wienet ANTENNA 15018 MAGNETIC HOLDER	F0.000.0036.1
wienet ANTENNA 150181V2 ANTENNA ROD	F0.000.0036.2
wienet ANTENNA 15854 WIFI MAGNET ANT.	F0.000.0037.4
wienet ANTENNA 15874V2 WIFI ROOF ANT.	F0.000.0037.5
wienet ANTENNA 15862V2 PANEL ANT.	F0.000.0037.6
wienet PS 12V 15094 12V POWER SUPPLY V3	F0.000.0037.7
wienet ANTENNA 15872V2 PANEL ANT.	F0.000.0037.8
wienet I/O CABLE 15096V3 1M	F0.000.0037.9
wienet I/O CABLE 15096V3 3M	F0.000.0038.0
wienet RJ45 8S Terminal	80.000.3001.0
wienet RJ45 extender	80.000.3002.0
wienet PATCH-CABLES MOD ZBH RJ45	78.999.4x00.0

Description

Programming adapter for Siemens controllers from MPI/Profibus to Ethernet
Mobile radio antenna 2G, 3G, 4G roof antenna, suitable for outdoor installation
Magnetic holder for mobile radio antennas
Mobile radio antenna 2G, 3G, 4G for installation on magnetic holder
WIFI antenna with magnetic holder
WIFI antenna, roof antenna
Mobile radio antenna, panel antenna 2G, 3G, 4G, powerful (+5dBi) LTE antenna
Switching power supply 230 V AC / 12 V DC with preassembled plug for v3 routers
Mobile radio antenna, panel antenna 2G, 3G, 4G, powerful (+9dBi) LTE antenna
Preassembled connection cables 1 m, for connecting the I/Os with the v3 router
Preassembled connection cables 3 m, for connecting the I/Os with the v3 router
CAT.5 interface module push-in connection clamps to RJ-45 socket
CAT.5 interface module RJ-45 socket to RJ-45 socket
Patch-cables RJ45, different lengths (x = m see chart)

With wienet security routers and the VPN server portal WIE-Service24, machines and devices are securely connected to the Internet and the encrypted transfer of data via VPN is ensured.



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PERFORMANCE FEATURES

- + Internet connection
 - + Mobile radio standards
 - + VPN protocols
 - + Operating temperature
- LAN-LAN, WLAN, mobile communications
LTE 4G
open VPN, IpSec, L2TP, GRE (PPTP, easyVPN)
-40 °C to +75 °C



CE E8

WIENET – EASY REMOTE MAINTENANCE.

One of the top goals of any machine builder today is the ability for remote maintenance of machines and systems. This reduces maintenance costs drastically and optimizes machine availability for the customers. The wienet Security VPN routers have been specially designed for the easy remote maintenance of machines and installations at customer locations or satellite stations using the Internet. This means, that OEMs and system integrators can troubleshoot machines with remote maintenance without the need for them being on site.



REMOTE ACCESS USING SECURE VPN CONNECTIONS

The Security VPN routers from Wieland enable the secure access to machines and systems by using encrypted VPN connections, supporting the standard VPN technologies OpenVPN and IPsec. Up to four VPN channels can be operated simultaneously.

The interaction with the VPN server portal WIE-Service24 v3 has been optimized for VPN operation.



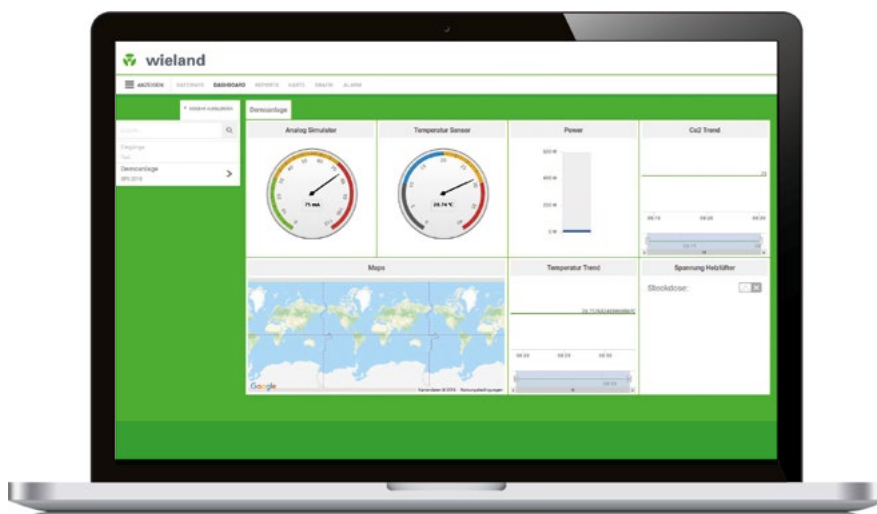
CONTROLLING AND MONITORING THE VPN CONNECTIONS

All wienet VPN routers (except the compact models) have digital inputs and outputs. With one input, for example, the VPN connection can be controlled via an PLC output or with a key switch. The digital output can be used as a switching output or status output. The VPN mobile routers can be controlled with SMS commands.



WEB-BASED USER INTERFACE

All wienet VPN routers are configured with a web-based user interface. This means that it can be operated with any standard browser without the need for installing extra software.



VERSATILE APPLICATIONS:

- **Energy supply**
Wind turbines, solar farms, transformer stations, combined heat and power units, biogas cogeneration systems, heat pumps, ...
- **Water and waste water management**
- **System monitoring in machine building**
Washing systems, compressors, packaging machines, ...
- **External surveillance camera**
- **Vending**
Online telemetry of sales or ticket vending machines
- **Mobile fleet management**
- **Smart metering**



READY-BUILT ROUTER APPS FOR EVEN MORE FUNCTIONS.

The functions of the wienet VPN routers can be expanded using preassembled software router apps.

We utilize the experiences we and our customers have gathered in recent years and offer our customers useful applications as free router apps. These expand the user interface, so to say. You do not have to change or implement any program code, but can use the functions at once and very easily.

EXAMPLES FOR ROUTER APPS:

- + Azure IoT SDK Python
- + Node-RED
- + Node-RED FTP Node
- + Node-RED MQTT Node
- + Diverse protocol converters
- + Layer2 Firewall
- + Modbus Logger



Please contact our wienet Service-Center netcom@wieland-electric.com for the complete list of all available router apps.

INDUSTRIAL MOBILE ROUTERS · WIENET WR-LTE V3

TECHNICAL DATA



Description	wienet WR-LTE v3 SL	wienet WR-LTE v3 SL 5-Port	wienet WR-LTE v3 SL 5-Port WiFi
Art. No.	83.041.0700.1	83.041.0709.1	83.041.0769.1
VPN mobile router interfaces			
Ethernet	2x 10/100 Mbit/s	5x 10/100 Mbit/s	5x 10/100 Mbit/s
USB slot	1x USB 2.0 host	1x USB 2.0 host	1x USB 2.0 host
SIM slot	2x mini SIM 2FF	2x mini SIM 2FF	2x mini SIM 2FF
SD slot	1x micro SD	1x micro SD	1x micro SD
Digital inputs	2x DI 10-60 V DC	2x DI 10-60 V DC	2x DI 10-60 V DC
Digital outputs	1x DO 300 mA / max. 60 V	1x DO 300 mA / max. 60 V	1x DO 300 mA / max. 60 V
WiFi/WLAN	-	-	1x WLAN 802.11 b/g/n
Antenna ports	ANT(SMA), DIV (SMA), GPS (SMA)	ANT(SMA), DIV (SMA), GPS (SMA)	ANT(SMA), DIV (SMA), GPS (SMA), WiFi (R-SMA)
LED indication	PWR, USR, DAT, IN0, IN1, OUT, SIM, WAN	PWR, USR, DAT, IN0, IN1, OUT, SIM, WAN	PWR, USR, DAT, IN0, IN1, OUT, SIM, WAN
Technical features			
Network connection	LTE	LTE	LTE
Networks	DHCP, NAT, PAT, VRRP, DynDNS Client, VLAN, QoS, DMVPN, PPPoE Bridge, Dial-In, NTP Client-Server, IGMP, BGP, OSPF, RIP, SMTP, SMTPS	DHCP, NAT, PAT, VRRP, DynDNS Client, VLAN, QoS, DMVPN, PPPoE Bridge, Dial-In, NTP Client-Server, IGMP, BGP, OSPF, RIP, SMTP, SMTPS	DHCP, NAT, PAT, VRRP, DynDNS Client, VLAN, QoS, DMVPN, PPPoE Bridge, Dial-In, NTP Client-Server, IGMP, BGP, OSPF, RIP, SMTP, SMTPS
VPN	open VPN, Ipsec, L2TP, PPTP, GRE, EasyVPN	open VPN, Ipsec, L2TP, PPTP, GRE, EasyVPN	open VPN, Ipsec, L2TP, PPTP, GRE, EasyVPN
Configuration and diagnostics	Web-Interface, SMS, SNMP v1/v2c/v3, Status	Web-Interface, SMS, SNMP v1/v2c/v3, Status	Web-Interface, SMS, SNMP v1/v2c/v3, Status
Technical data			
CPU	Cortex A8, 1GHz (2000 DMIPS)	Cortex A8, 1GHz (2000 DMIPS)	Cortex A8, 1GHz (2000 DMIPS)
Memory	256 MB flash memory, 512 MB RAM, 128 KB M-RAM	256 MB flash memory, 512 MB RAM, 128 KB M-RAM	256 MB flash memory, 512 MB RAM, 128 KB M-RAM
Operating voltage min.-max.	10 - 60 V DC	10 - 60 V DC	10 - 60 V DC
Power consumption max.	4 W	4 W	4 W
Operating temperature	-40 °C...+75 °C	-40 °C...+75 °C	-40 °C...+75 °C
Storage temperature	-40 °C...+85 °C	-40 °C...+85 °C	-40 °C...+85 °C
Rel. humidity during operation min.-max. (non-condensing)	0...95 %	0...95 %	0...95 %
Dimensions			
Width (mm)	55	55	55
Height (mm)	125	125	125
Depth (mm)	97	97	97
Weight approx.	375 g	375 g	375 g

GENERAL TECHNICAL DATA FOR THE SERIES	
Mounting method	DIN rail
Protection class	IP30
Housing material	Metal
RoHs	Yes
Norms and approvals	CE, E8

INDUSTRIAL MOBILE ROUTER · WIENET 4G LTE V2

TECHNICAL DATA



Description	wienet LR240 EMEA
Art. No.	83.041.0240.1

VPN mobile router interfaces

Ethernet	2x 10/100 Mbit/s
USB slot	-
SIM slot	2x micro SIM 3FF
SD slot	-
Serial interfaces	1x RS232, 1x RS485
Digital inputs	1x DI 36 V / 0.5 mA
Digital outputs	1x DO 100 mA / max. 36 V DC
WiFi/WLAN	-
Antenna ports	ANT(SMA), DIV(SMA)
LED indication	PWR, USR, DI, DO, DAT, SIG, TECH, SIM

Technical features

Network connection	LTE
Networks	DHCP, NAT/PAT, SSH, VRRP, PPPoE, SNMP, SMTP, Dynamic DNS client, DNS proxy, VLAN, QoS, NTP Client/Server, Backup Routes, Port Forwarding, Host Port Routing, Ethernet Bridging, Load Balancing, IPv6 Dual Stack
VPN	WireGuard, OpenVPN, IPsec with IKEv1 and IKEv2, GRE, L2TP, PPTP
Configuration and diagnostics	Web-Interface, SSH

Technical data

CPU	ARM926EJ-S (600 MHz)
Memory	64 MB flash memory, 128 MB RAM
Operating voltage min.-max.	9 - 48 V DC
Power consumption max.	10 W
Operating temperature	-40 °C...+75 °C
Storage temperature	-40 °C...+85 °C
Rel. humidity during operation min.-max. (non-condensing)	0...95 %

Dimensions

Width (mm)	25
Height (mm)	125
Depth (mm)	95
Weight approx.	300 g

GENERAL TECHNICAL DATA FOR THE SERIES

Mounting method	DIN rail, wall mount
Protection class	IP30
Housing material	Metal
RoHs	Yes
Norms and approvals	CE

INDUSTRIAL LAN ROUTER · WIENET WR-LAN

TECHNICAL DATA



Description	wienet WR-LAN v3 SL 5-Port	wienet WR-LAN v3 SL 5-Port WIFI
Art. No.	83.041.0809.1	83.041.0869.1
VPN LAN router interfaces		
Ethernet	5x 10/100 Mbit/s	5x 10/100 Mbit/s
USB slot	1x USB 2.0 Host (type A)	1x USB 2.0 Host (type A)
SIM slot	1	1
Digital inputs	1x DI 10 - 60 V DC	1x DI 10 - 60 V DC
Digital outputs	1x DO 300 mA / max. 60 V	1x DO 300 mA / max. 60 V
WiFi/WLAN	-	1x WLAN 802.11 b/g/n
Antenna ports	-	WIFI (R-SMA)
LED indication	PWR, USR, IN0, IN1, OUT	PWR, USR, IN0, IN1, OUT
Technical features		
Network connection	10/100 Mbit RJ-45	10/100 Mbit RJ-45
Networks	DHCP, FTP, NAT, PAT, VRRP, DynDNS Client, VLAN, QoS, PPPoE Bridge, Dial-In, NTP client server, BGP, OSPF, RIP, SMTP, SMTPS	DHCP, FTP, NAT, PAT, VRRP, DynDNS Client, VLAN, QoS, PPPoE Bridge, Dial-In, NTP client server, BGP, OSPF, RIP, SMTP, SMTPS
VPN	open VPN, Ipsec, L2TP, GRE	open VPN, Ipsec, L2TP, GRE
Configuration and diagnostics	Web interface, SMS, e-mail, SSH, SNMP v1/v2c/v3, status	Web interface, SMS, e-mail, SSH, SNMP v1/v2c/v3, status
Technical data		
Operating voltage min.-max.	10 - 60 V DC	10 - 60 V DC
Power consumption max.	4.5 W	4.5 W
Operating temperature	-40 °C...+75 °C	-40 °C...+75 °C
Storage temperature	-40 °C...+85 °C	-40 °C...+85 °C
Rel. humidity during operation min.-max. (non-condensing)	0...95 %	0...95 %
Dimensions		
Width (mm)	55	55
Height (mm)	125	125
Depth (mm)	97	97
Weight approx.	327 g	327 g

GENERAL TECHNICAL DATA FOR THE SERIES	
Mounting method	DIN rail
Protection class	IP30
Housing material	Metal
RoHs	Yes
Norms and approvals	CE, E8



VPN SERVER

Secure access to your machines and plants – around the globe.



VPN REMOTE MAINTENANCE		
HARDWARE	WIENET VPN ROUTERS	WIENET ACCESS POINT
PORTAL	WIE-SERVICE24	
APPLICATIONS	SECURE ACCESS TO CONTROLLERS, HMI, DRIVES, ...	



REMOTE MAINTENANCE VIA WIENET VPN PORTAL.

The wienet VPN portal is the pivotal element where all VPN connections are managed. The VPN connections are based on OpenVPN. The VPN end devices (router, PC, smartphone, Access Points, ...) require a VPN configuration file, which is generated in the wienet VPN portal and made available to the user. After the implementation, the end devices establish an outgoing, encrypted VPN tunnel to the wienet VPN portal. The assignments of who is allowed to communicate with who are also specified in the wienet VPN portal. Users can be created and rights can be assigned in the user management.

FEATURES OF THE WIENET VPN PORTAL



SECURE CONNECTION

The wienet VPN portal ensures the secure connection of your machines and systems: The individual specification of the access rights and encryption of the VPN connections protects your machines and systems. Tedious, error-prone manual router configuration is no longer necessary. Remote access can be accomplished with any Internet-capable PC or smartphone.

The first 30 VPN licenses are free of charge!



THE LICENSE MODEL IN DETAIL

After the test phase with only one or very few VPN end devices, you have up to 30 additional VPN client licenses at your disposal for free, which you can use to let several persons and machines communicate with each other securely using an encrypted VPN connection.

Please specify the desired number of licenses or VPN clients in your order or contact your Wieland contact person to optimally coordinate your application.



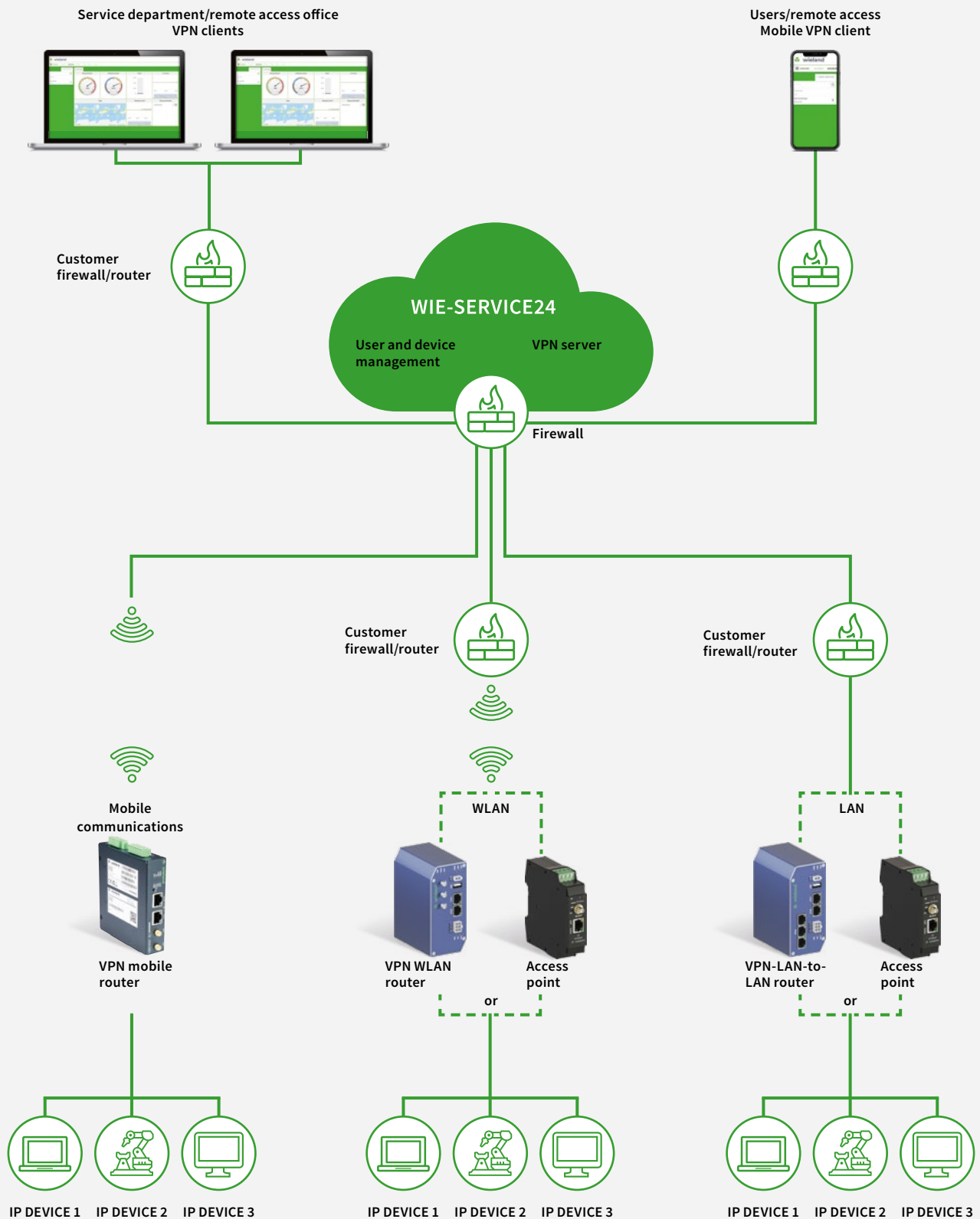
TEST ACCESS

The wienet VPN portal can be tested free of charge in connection with the wienet VPN routers.

Please get in touch with your wienet VPN contact at Wieland Electric under industry@wieland-electric.com or by phone with our Telesales telephone: +49 951 9324-991.

You will be provided with a VPN end device for a limited time + wienet VPN portal access (several VPN end devices on request).

WIE-SERVICE24 APPLICATION



REMOTE MAINTENANCE VIA WIENET VPN PORTAL.

M2M DEVICE MANAGEMENT IN THE CLOUD

Complete systems, machines and networks can be connected to each other with our VPN service portal. The individual specification of the access rights and the encryption of the VPN connections protects your machines and systems.

You set up the authorization management in seconds, individually for each device. The VPN service portal is so easy to use that users do not need in-depth knowledge of networks. WIE-SERVICE24 as one of the first software solutions for VPN service portals is a proven system for remote maintenance and has been undergoing a massive overhaul. User feedback was directly considered in the development of the current version 3.

FEATURES OF THE WIENET VPN SERVER



PERFORMANCE

Intel Skylake Xeon CPUs together with fast NVMe SSDs provide highest performance. High-speed thanks to redundant 10 Gbit network connection.



DAILY BACKUPS

Backups are created daily to ensure the recovery of an environment in case of an unexpected failure.



DDOS PROTECTION

The server is protected from DDoS attacks to the greatest possible extent thanks to comprehensive hardware applications and a complex filtering technology.



DATA PROTECTION

Operation of the cloud-based VPN server conforming to the GDPR.



EASY USER NAVIGATION

Clear, compact interface (with “one-page” feel) enables an easier and more intuitive user operation. Users can, as a brand new feature, create own accesses, which provides enhanced flexibility.



MORE TECH. FEATURES

- Secure networking based on proven and open standards
- 2-factor authentication
- Multi routing (≥ 2 subnets for each VPN tunnel)
- Flexible expansion of an exploited VPN IP address range

ACCESS PERMISSIONS

Access to the complete IP network behind the router is possible from any desktop and tablet computer via the VPN center. This can be complete systems, for example. Routing from one LAN to another LAN (site-to-site VPN) is also possible. This is a skillful workaround to avoid address conflicts during IP configuration in the connected local networks.



Figure: Access permissions

ENHANCED USER MANAGEMENT

The new, enhanced user management is particularly remarkable. In WIE-SERVICE24 v3, customers can for the first time create accounts for their customers and inherit the complete scope of functions. In these cases, users only see their own systems and/or VPN accesses.

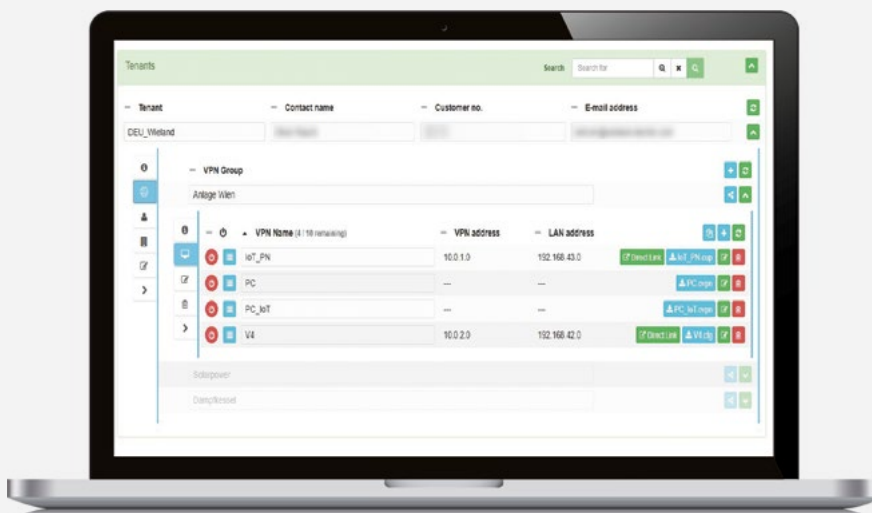


Figure: Simplified user management (one-page design)

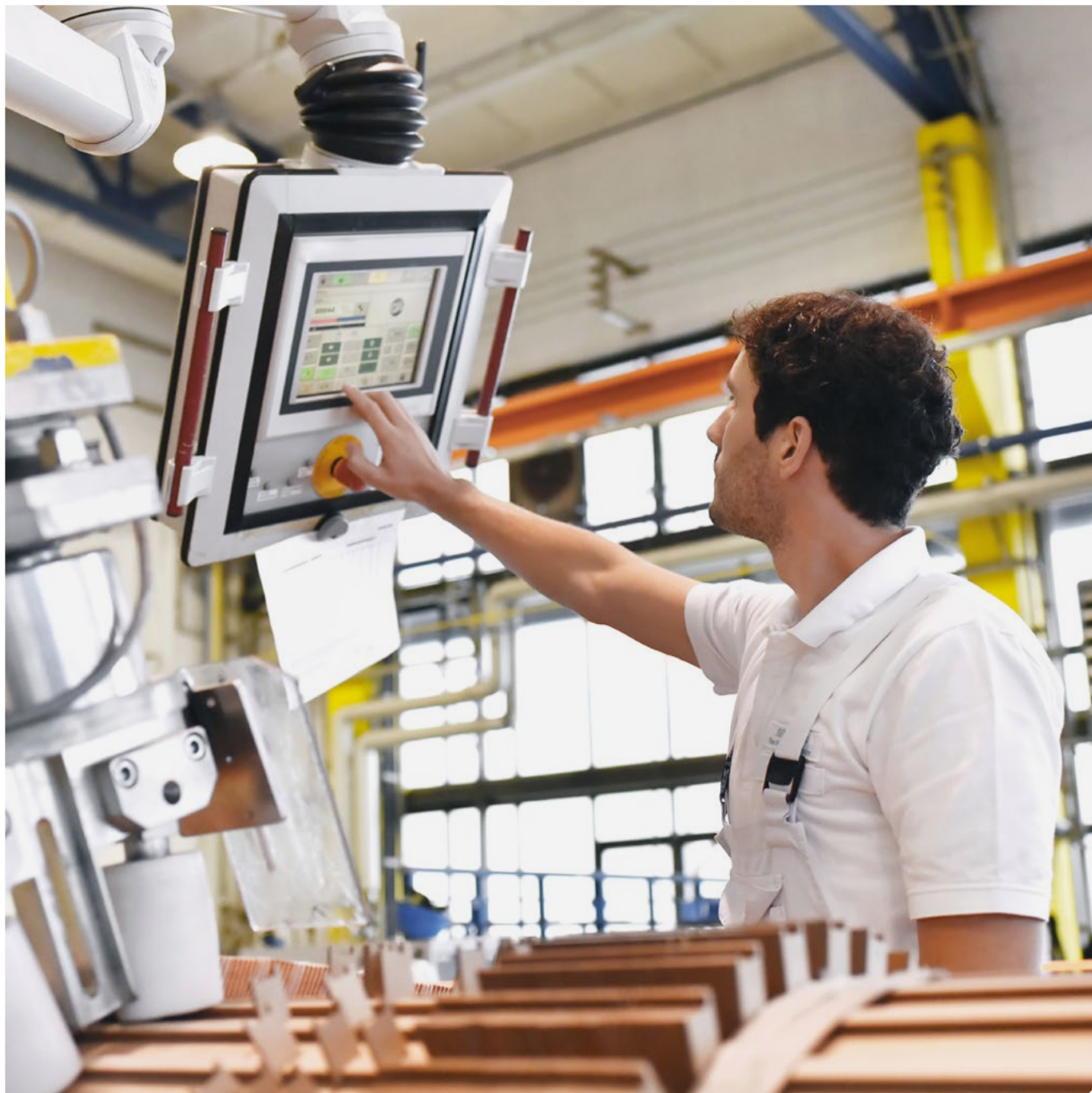
FUNCTIONAL TOUCH PANELS

WIENET HMI ECO

Touch panels are today used in many machines and systems for the visualization, operation, and diagnosis. By transferring the user habits from the consumer world into the automation world, the HMI ECO series has been especially developed for industrial requirements and needs.



- + Simple programming, configuration and quick commissioning via USB, Ethernet or Serial with hmi PLAN software
- + Event and scheduled controlled processes as well as scripts enable the HMI to take on control tasks
- + Integrated data logger with graphical visualization and alarm notifications via mail
- + Allows up to 6 links with different PLCs via PROFINET, EtherNET/IP and Modbus
- + Seamless data transfer of variables, tags and variable addresses thanks to the well-thought-out solution of the HMI panel and samos® PRO safety controller
- + Individual and customized HMI panels available (MOQ >100 pcs)
- + Integrated Virtual Networking Computing (VNC) Server



PERFORMANCE FEATURES

- + Resolution: up to 1024 x 768 pixels
- + Expanded temperature range: From -10 °C to +60 °C (standard panels)
From -20 °C to +60 °C (on request)
- + Design: IP66 / Nema 4
- + Screen sizes: 4.3", 7", 10", 12.1" and 15"
- + Programmable menu pages: > 7,000



EASY CONFIGURATION – HMI PLAN

Rely on the safe operation of your machine. hmi PLAN, our software for the HMI ECO panels, integrates software drivers for more than 40 manufacturers. Configuration will also be like child's play with hmi PLAN. Import your variables from samos® PLAN 6 into the software for easy configuration of your panel and avoid naming errors when creating the safety variables to shorten the commissioning time of your panel.



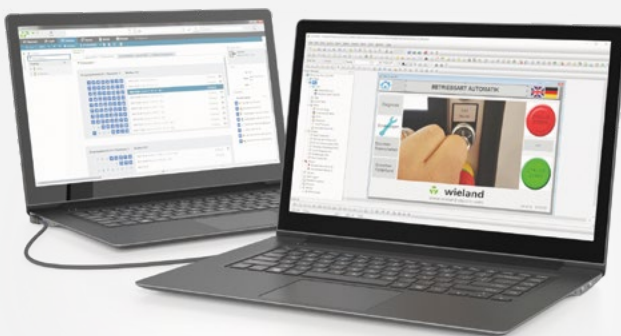
THE BENEFITS TO YOU:

- + Flexible structure with several applications
- + Conversion independent of variable
- + Non-volatile internal Memory
- + 9 user levels with password protection
- + Real-time clock and data even after reboot
- + Alarm messages per e-mail
- + Recipe management
- + Data collection, sequence control, macros

PERFECT SOLUTION BUNDLE

Together with samos® PRO COMPACT, we offer you a consistent, intuitive complete solution for your machines.

- + Programmable with hmi PLAN via Ethernet/USB
- + Convenient import of variables with samos® PLAN 6
- + On-board Modbus TCP in SP-COP2-ENI
- + Wieland driver in hmi PLAN for samos® PRO
- + Default settings in hmi PLAN
- + Easy toggling between Modbus master and slave



SEEMLESS DATA EXCHANGE

Rely on the import/export function of hmi PLAN with samos® PLAN and avoid errors when naming your safety functions.

- + Export of variables from samos® PLAN 6 with “one click”
- + Convenient import of tags in hmi PLAN
- + Automatic import of variable addresses
- + Considerably time-saving when troubleshooting

MY LOGO – CUSTOMER-SPECIFIC DESIGN

Our HMI touch panels are used to visualize, operate, and diagnose in many machines and systems. Together with our safety controller samos® PRO, the automation of entire systems is possible with HMI ECO.



15"

12,1"

10"

7"

4,3"

“MyLogo” offers you our panels in your own design. This ensures the consistent design of your machines. Starting from orders of 100 panels.

CREATE YOUR OWN DESIGN IN A FEW STEPS

- + Get temporary offer
- + Select your RAL colors
- + Download and use of the DXF file template
- + Send customized design template to Wieland
- + Clarification and feedback of production/delivery time by Wieland
- + Get final offer
- + Validate and order final design (DXF file)



YOU HAVE THE CHOICE:

- Screen size
- BG Color
- Own logo
- Customized printing
- Include front USB port
- Include function keys



VNC FUNCTIONALITY

Control via smartphone and tablet

With our HMI-ECO panels, it is now possible to control your machine with your smartphone or tablet. Virtual Network Computing (VNC) makes it possible. This gives you flexibility when it comes to controlling as well as to monitoring your machine.

YOUR ADVANTAGES AT A GLANCE

- + End devices for commissioning and diagnosis
- + Each panel serves as a VNC server
- + Remote control for the machine
- + Monitoring of the machine
- + Authentication by user level

TOUCH PANELS · WIENET HMI ECO

TECHNICAL DATA



Description	HMI-ECO-043	HMI-ECO-070	HMI-ECO-100
Art. No.	83.050.0000.0	83.050.0001.0	83.050.0002.0

Technical data

Screen size	4.3" diagonal	7" diagonal (wide screen)	10" diagonal
Resolution	480 x 272 pixels	800 x 480 pixels	1024 x 600 pixels

Dimensions/weight

Width (mm)	129	203.5	270.8
Height (mm)	103	148.5	212.8
Depth (mm)	33	37	42.5
Frame size (mm)	118.5 x 92.5	191.5 x 138	259.5 x 201.5
Weight approx.	230 g	550 g	1100 g

Technical features

Programming software	hmiPLAN	hmiPLAN	hmiPLAN
Screen type	TFT color LCD with LED backlight	TFT color LCD with LED backlight	TFT color LCD with LED backlight
Touch technology	Resistive touch	Resistive touch	Resistive touch
Serial interface	1x Industrial Ethernet, 1x RS232, 1x RS422, 3x RS485	1x Industrial Ethernet, 1x RS232, 1x RS422, 4x RS485	1x Industrial Ethernet, 1x RS232, 1x RS422, 4x RS485
Number of colors max.	16 bits	16 bits	16 bits
Backlight life in hours	20000 h	20000 h	20000 h
Luminance	450 cd/m ²	450 cd/m ²	350 cd/m ²
CPU type	RISC ARM9 32 bit	RISC ARM9 32 bit	RISC ARM9 32 bit
Main memory max.	64 MB	64 MB	64 MB
USB 2.0	Host and client	Host and client	Host and client
Ethernet	RJ-45	RJ-45	RJ-45
Operating voltage min.-max.	24 V DC +- 10 % (insulated)	24 V DC +- 10 % (insulated)	24 V DC +- 10 % (insulated)
Power	10 W	20 W	20 W
Real time clock	Yes	Yes	Yes
Battery backed RAM	Yes	Yes	Yes
Operating temperature	-10...+60 °C (-20...+60 °C on request)	-10...+60 °C (-20...+60 °C on request)	-10...+60 °C (-20...+60 °C on request)
Storage temperature	-20...+70 °C	-20...+70 °C	-20...+70 °C
Rel. humidity during operation min.-max. (non-condensing)	10-90 %	10-90 %	10-90 %

GENERAL TECHNICAL DATA FOR THE SERIES

Mounting method	Built-in component
IP rating (front)	IP66 / NEMA 4
Cooling	Natural Cooling with min. 50 mm distance
Shock	50 G, 11 Ms, X, Y, Z, direction (EN 60068-2-27)
RoHs	Yes
Norms and approvals	FCC Part 15 Class A, CE, cULus (cULus for size 12 & 15 only from Q4/2019)

TOUCH PANELS · WIENET HMI ECO

TECHNICAL DATA



Description	HMI-ECO-120	HMI-ECO-150
Art. No.	83.050.0003.0	83.050.0004.0
Technical data		
Screen size	12.1" diagonal	15" diagonal
Resolution	1024 x 768 pixels	1024 x 768 pixels
Dimensions/weight		
Width (mm)	335.4	399.1
Height (mm)	245.8	267.6
Depth (mm)	58.2	57.5
Frame size (mm)	302 x 228	384.5 x 283
Weight approx.	2000 g	3000 g
Technical features		
Programming software	hmiPLAN	hmiPLAN
Screen type	TFT color LCD with LED backlight	TFT color LCD with LED backlight
Touch technology	Resistive touch	Resistive touch
Serial interface	1x Industrial Ethernet, 1x RS232, 1x RS422, RS485	1x Industrial Ethernet, 1x RS232, 1x RS422, 4x RS485
Number of colors max.	16 bits	16 bits
Backlight life in hours	20000 h	20000 h
Luminance	500 cd/m ²	350 cd/m ²
CPU type	RISC ARM9 32 bit	RISC ARM9 32 bit
Main memory max.	64 MB	64 MB
USB 2.0	Host and client	Host and client
Ethernet	RJ-45	RJ-45
Operating voltage min.-max.	24 V DC +- 10 % (insulated)	24 V DC +- 10 % (insulated)
Power	20 W	20 W
Real time clock	Yes	Yes
Battery backed RAM	Yes	Yes
Operating temperature	-10...+60 °C (-20...+60 °C on request)	-10...+60 °C (-20...+60 °C on request)
Storage temperature	-20...+70 °C	-20...+70 °C
Rel. humidity during operation min.-max. (non-condensing)	10-90 %	10-90 %

ACCESSORIES



Description	Type	Art. No.	PU
Ethernet programming cable, 2 m	SP-CABLE-ETH1	R1.190.1020.0	1
Single-user license for hmiPLAN programming software	HMI-LICENSE-SINGLE	ZW.000.0170.0	1

ACCESSORIES



Description	wienet ANTENNE 15863V2	wienet ANTENNE 15018	wienet ANTENNE 150181V2
Art. No.	F0.000.0035.1	F0.000.0036.1	F0.000.0036.2
General data			
Application	Mobile radio round beam roof antenna for indoors and outdoors	Magnetic holder for antennas with SMA/M connection	Mobile radio rod antenna
Technical data			
Frequency bands	GSM, GPRS, EDGE, UMTS, LTE	GSM, GPRS, EDGE, UMTS, LTE	GSM, GPRS, EDGE, UMTS, LTE
Gain max.	4 dBi	-	5 dBi
Connection	SMA/M	SMA/F (antenna), SMA/M (cable)	SMA/M
Cable	5 m	2.5 m	-
Dimensions, approx. in mm	82 x 48 x 48	42 x 50 Ø	Height approx. 240 mm
Installation	Including mast or wall mounting bracket	Magnetic holder	On magnetic holder or directly on device

Antenna



Description	wienet ANTENNE 15862V2	wienet ANTENNE 15872V2	wienet ANTENNE 15854V2 WIFI MAGNET ANT.	wienet ANTENNE 15874V2 WIFI
Art. No.	F0.000.0037.6	F0.000.0037.8	F0.000.0037.4	F0.000.0037.5
General data				
Application	Mobile radio high-performance outdoor antenna for LTE	Mobile radio high-performance outdoor antenna for LTE	WLAN 2.4 GHz WIFI/WLAN rod antenna with magnetic holder	WLAN 2.4 GHz WIFI/WLAN roof/wall antenna for indoors and outdoors
Technical data				
Frequency bands	GSM, GPRS, EDGE, UMTS, LTE	GSM, GPRS, EDGE, UMTS, LTE	2.4 GHz ISM band for WIFI/WLAN, Bluetooth, or Zigbee	2.4 GHz ISM band for WIFI/WLAN, Bluetooth, or Zigbee
Gain max.	5 dBi	9 dBi	4.8 dBi	4.8 dBi
Connection	2x SMA/M	2x SMA/M	SMA/M-RP	SMA/R
Cable	2x 5 m	2x 5 m	2.5 m	5 m
Dimensions, approx. in mm	186 x 155 Ø	230 x 180 Ø	223 x 29	82 x 48 x 48
Installation	Including mast or wall mounting bracket	Including mast or wall mounting bracket	Magnetic holder	Including mast or wall mounting bracket

Patch-cables RJ45



Type	Art. No.	PU
wienet Patch-cables MOD ZBH RJ45 0,25 m	78.999.4000.0	1
wienet Patch-cables MOD ZBH RJ45 0,5 m	78.999.4100.0	1
wienet Patch-cables MOD ZBH RJ45 1,0 m	78.999.4200.0	1
wienet Patch-cables MOD ZBH RJ45 2,0 m	78.999.4300.0	1
wienet Patch-cables MOD ZBH RJ45 3,0 m	78.999.4400.0	1
wienet Patch-cables MOD ZBH RJ45 5,0 m	78.999.4500.0	1
wienet Patch-cables MOD ZBH RJ45 7,5 m	78.999.4600.0	1
wienet Patch-cables MOD ZBH RJ45 10 m	78.999.4700.0	1

ACCESSORIES

Programming adapter MPI-ETH ADAPTER ACCON-NETLINK-PRO



Type	Art. No.	PU
MPI-ETH ADAPTER ACCON-NETLINK-PRO	F0.000.0031.8	1

TECHNICAL DATA	
Supported operating systems	No restriction
Hardware requirements	Ethernet interface and TCP/IP protocol
Supported PLCs	S7-200, S7-300, S7-400
Weight in kg	Approx. 0.25
Protection class	IP20
Supply voltage	24 V DC \pm 25 %
External power supply	Yes
Max. current consumption	150 mA
Galvanically insulated	Yes
Operating temperature	0 °C...60 °C
Storage/transport temperature	-20 °C...+90 °C
Admissible relative air humidity	5...85 % at 30 °C (no condensation)
Connection cable to the PLC	Permanently mounted, active (no stub line, 1.2 m)
Connection cable to PC/router	Patch cable (Ethernet, straight, 3 m)
Supported bus profiles	MPI, DP, standard, universal (DP/FMS), user-defined, with automatic detection
Supported transmission rates from bus connection to PLC	9.6 kbit/s to 12 Mbit/s with automatic detection
Supported Ethernet transmission rates	10/100 Mbit/s with automatic detection
Max. number of connections on TCP/IP	16

Switching power supply 12 V for v3 routers



Type	Art. No.	PU
wienet PS 12 V v3	F0.000.0037.7	1

TECHNICAL DATA	
Input voltage	100 - 240 V AC 50/60 Hz
Output voltage	12 V DC
Output current max.	1000 mA

Pre-assembled 6-pole IO male with wires for v3 routers

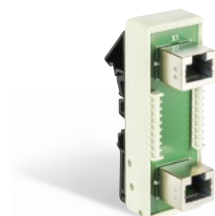


Type	Art. No.	PU
wienet IO-Kabel 1m	F0.000.0037.9	1
wienet IO-Kabel 3m	F0.000.0038.0	1

TECHNICAL DATA	
Wires	CYA 0.5 mm ² (2x white, 2x purple, 2x orange)
Male	WR-MPC4 for v3 router IO interface

RJ45 interface modules

Passive interface modules, RJ45 to RJ45, RJ45 to PCB terminals, shield is also connected, PCB version with shield connection clamp



Type	Art. No.	Art. No.	PU
wienet RJ45 8S Terminal	80.000.3001.0		1
wienet RJ45 Extender		80.000.3002.0	1

TECHNICAL DATA			
Connecting cable	STP Cat 5		
Rated current	0.9 A		
Rated voltage	50 V DC		
Voltage resistance	300 V		
Data rate	100 Mbit/s		
Operating temperature range	-40 °C...+65 °C (85 °C max. 0.6 A)		
Weight approx.	approx. 50 g		
Pin assignment	1:1		
Housings	Plastic PA 6.0 GK30		
Installation	Top-hat rail		
Dimensions (W x H x D)	25.6 x 51 x 80 mm	25.3 x 46.5 x 80 mm	
Connection type	Push-in terminals and RJ45 socket	2x RJ45 socket	

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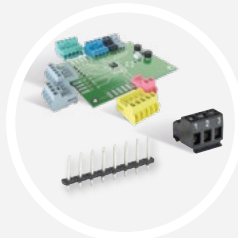
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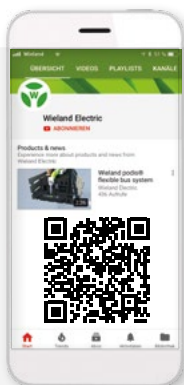
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