WebHMI allows you to build unified remote monitoring or control system for a set of automation devices using a standard Web browser — on the local network or the Internet. Project development does not require high qualification and skills — it is done in configuration mode.

Features and Advantages

- Direct control and monitoring via the web — in a local network or the Internet, from any platform — mobile phone device, tablet, laptop, computer, etc., simultaneously from different locations, with no limit on the number of users

- On-line Development Environment, which is available and ready immediately after the device power on, with no restrictions on the number of tags or licenses for additional software modules

- API to communicate directly with user applications

- Support for popular industrial protocols, with the ability to use different protocols on the same physical line, and to add custom protocols

- The devices can be used for supervisory control of distributed systems when they transmit data to the upper layer (including "cloud" website)

Functionality

Visualization	**Built-in interface editor:** built-in editor that runs in a common web browser allows you to create visual screens similar to the screens in HMI or SCADA systems, with elements of text, vector graphics, animation, trends, historical graphs, messages, text entry fields, and elements of recipe control.
	Access control: different levels of access can be granted for different users as well as access restrictions to specific dashboards (screens)
Communication with the automation devices	**Supported protocols:** Allen-Bradley DF1, Delta Electronics DVP, Modbus RTU/ASCII/ TCP, OWEN, Siemens PPI, Siemens S7 Communication Iso-Over-TCP, 1-Wire.
	«Multi-protocol» function: ability to work simultaneously with different protocols on the same physical line.

	Custom protocols: for non-standard or not supported devices, the user himself can add program code to send and receive protocol telegrams, using a handy scripting language.
	Data exchange optimization: there are possibilities of assigning different priorities for communication to get faster response and speed for specific data, fixing scan time, and using block reads for faster data exchange.
	"Any-to-any protocol" gateway function: using the built-in scripting language, you can easily implement data exchange between different (with incompatible protocols) automation devices connected to WebHMI, like PLCs, remote I/O, etc.
Integration possibilities	**Custom API:** using API calls, WebHMI can directly exchange data with any business or user applications, other web-sites etc.
	ModBus TCP Server: a group of tags can be accessed by external clients like SCADA system, PLC or another WebHMI, via Modbus TCP protocol
Control	**User-scripts:** the user can write functions in popular scripting language Lua, for implementing fairly complex algorithms of data processing, schedulers, logic control (similar to PLC) etc.
Notification	**Messages sending** via SMS or Telegram messenger
Network capabilities	**Built-in functions of the router:** routing, firewall, NAT, and other features allow you to integrate WebHMI in any network infrastructure without additional network equipment
	Wi-Fi interface: can work simultaneously in different networks, as a client and as an access point, WPS mode is also supported
	VPN support: simple implementation of remote access to the system, without use of "white" IP-addresses.
	NTP server/client: time synchronization via NTP protocol
	Built-in support for 3G modems. Modem re-initialization by disabling USB power is supported too.
	Remote service access: user can operate the equipment connected to WebHMI using service and development tools, via a virtual COM port and Ethernet (using the possibility of forwarding traffic over the gateway)

Specifications

Platform	Ultra-compact, fan-less MIPS processor architecture, Embedded Linux
Storage	SD card
Interfaces	2 × Ethernet 100BASE-T, RJ45 with galvanic isolation, ESD 3 kV
	1 × WLAN 802.11 b/g/n (transmitter power 100 mW), RP-SMA antenna connector
	1 × RS-485, «Multi-protocol» mode, 250/921 Kbits/sec*, with galvanic isolation of 2500 V, ESD – 8 kV
	1 × USB 2.0 — load capacity up to 500 mA, controlled power, ESD protection comp. IEC 61000–4–2 level 4: 15 kV (air discharge) — 8 kV (contact)
	Additional ports: RS-232/422/485, M-bus, 1–Wire, etc. via USB converters
3G-modems support	Yes
I/O	2 × solid state relays (125mA, 240V)
RTC	Yes
Watchdog timers	Yes (system and communication)
Speed and performance	Configurable poll time (up to 5 ms)
	Adjustable frequency of the data display in the web interface (up to 50 ms)
Power	24V (18...32V) 25mA (without USB devices) Built-in UPS (Li–Po battery, 7.4V 650mAh)
Housing	ABS-plastic, mounting on DIN-profile
Protection	IP40
Dimensions (HxWxD)	101×35×120 mm.
Weight	300 gr.
Temperature range	0—50 °C
Standard compliance	CISPR 22:2007, CISPR 24:2008 (CISPR 24:1997, IDT), 4467–1:2005, IEC 61131-2:2006, 3626-97
Contents of package	Packaging, interface connector, Wi–Fi antenna, warranty card

*Depends on the device version

Dimensional drawing

USB WAN LAN

Reset

PWR
ERR

Wi-Fi
WWW
VPN

TX
RX

ON/OFF

webhmi

101 mm

35 mm

Wi-Fi   PWR   RELAY   RS
          – + +   SG B A

120 mm