IOT CLOUD SOLUTIONS

Cloud
BOX

SENECA
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IOT CLOUD SOLUTIONS

CLOUD BOX – INDUSTRIAL IOT BOX WITH SUPERVISORY WEB APPLIANCE

WHAT CLOUD BOX IS

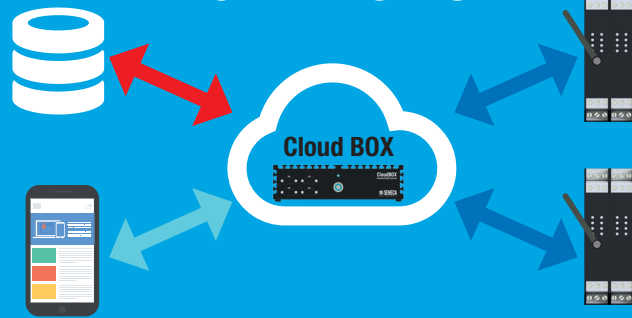**Cloud BOX**

IoT – Cloud solution for data centralization, remote connections management, multi-user custom supervision pages editing.
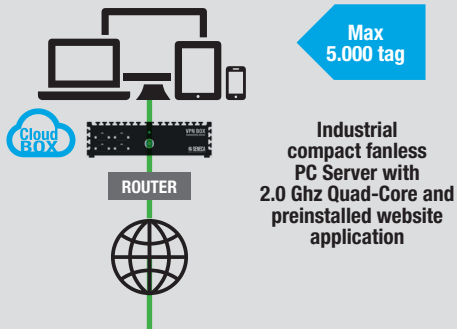
- Sending commands HOW IT WORKS to dataloggers, RTUs and communication devices
- Incoming data storage from fiaeld devices into a centralized database
- Access to Cloud BOX through custom web pages
- Available in built-in version or Virtual Machine / VmWre with third parties server
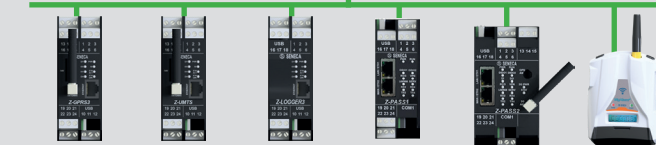
HOW IT WORKS

Cloud BOX
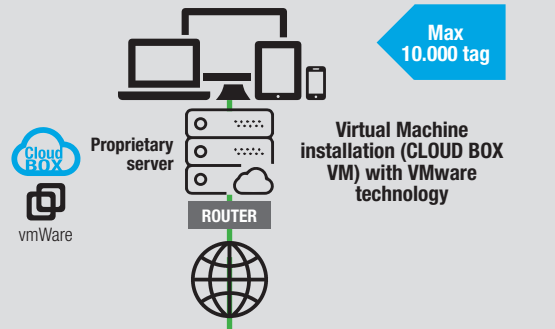
ARCHITECTURES

BUILT-IN SYSTEM

Max 5.000 tag

ROUTER

Industrial compact fanless PC Server with 2.0 Ghz Quad-Core and preinstalled website application
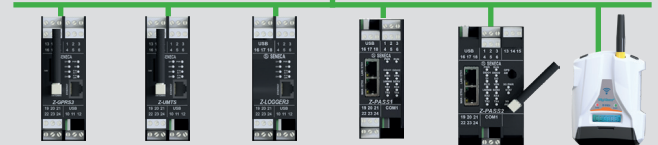
Supported devices: Z-GPRS3, Z-UMTS, Z-LOGGER3, Z-PASS1, Z-PASS2, MYALARM SEAL

VIRTUAL MACHINE

Max 10.000 tag

Proprietary server

vmWare

ROUTER

Virtual Machine installation (CLOUD BOX VM) with VMware technology

Supported devices: Z-GPRS3, Z-UMTS, Z-LOGGER3, Z-PASS1, Z-PASS2, MYALARM SEAL

HIGHLIGHTS

HARDWARE
Compact fanless PC

WEB APPLICATION
Intuitive interface with HTML5 and CSS3 technologies

SUPPORTED DEVICES
It can be used together with Z-GPRS3, Z-UMTS, Z-LOGGER3, Z-PASS1, ZPASS2, MYALARM SEAL

TAGS MANAGEMENT
Limit quota up to **10.000 tags** (Virtual Machine) or 5.000 tags (physical server)

USER ACCESS
Flexible and protected mult-user / multidevice access

SUPERVISION
Responsive web pages editing with built-in dashboards, synoptics and widgets for field devices supervision

DATA STORAGE
Data and alarms centralized storage
Max storage time 10 years
Min sample time 1 min

HISTORICAL DATA / ALARMS
Alarms, events, data history visualization on web pages

SENDING COMMANDS
Sending commands to connected devices bypassing SIM locks and firewalls (compatibility wth any data/M2M SIM)

REMOTE CONNECTION
Communication management with datalogger by 2G/ 3G+ / Ethernet and HTTP, HTTPS, FTP protocols

DATA EXPORT AND RECOVERY
Backup, data recovery automatic system and export data to csv file

SENDING EMAIL OR TELEGRAM MESSAGE
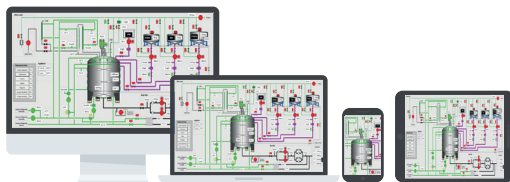Sending email or alarm telegram message to phonebook

WEB APPLICATION

Cloud BOX

Cloud BOX provides several widgets (input status, chart, bars etc), i.e. element that represent the status of connected devices. From these widgets are achievable responsive web pages (PC, tablet, smartphone), dashboard type (eg. historical data, commands, events management, trend) or supervision interface.

Please access test page
https://cloudbox.seneca.it/

HMI / SYNOPTIC PAGES

Through Cloud BOX is easy to import background images and insert animated widget to build intuitive HMI synoptic pages of the plants directly from the web.

HISTORICAL DATA / LOG FILES

Pump Data

Historical data for statistical analysis

CONTROL COMMANDS / STATUS

Underpass

Sending commands to devices and status remote visualization.

GRAPHICS VISUALIZATION

Pump Data

Simultaneous graphics visualization

TRENDS / DATA EXPORT

Data Export

Collected data can be visualized through historical trends and exported to csv or excel file

TAGS CALCULATION

Calculation

You can perform calculations on different tags / variables of the same device.

Available tags (real only)

Expression (case sensitive)

(V1*V2)-(V3*V4)

Logical Operators	Arithmetic Operators	Bitwise Operators
not or !	+ (addition)	& (and)
and or &&	- (subtraction)	| (or)
or or ||	* (multiplication)	^ (xor)
	/ (division)	
	% (modulus)	
	** (pow)	

EVENTS / ALARMS

Events

Events and alarms storage

ONLINE WEB PAGES EDITING

Test

Edit and update web pages layout directly from the web

IOT CLOUD SOLUTIONS

	CLOUD BOX (2.0)	**CLOUD BOX VM (2.0)**
	NEW	NEW Cloud BOX — vmware
	Industrial IoT Box	**CLOUD BOX Virtual Machine**

PHYSICAL SERVER

GENERAL DATA

Power supply	12 Vdc (power supply unit included)	-
Operating temperature	0..+40 °C	-
Storage temperature	-20..+85 °C	-
Dimension (D x W x H)	165 x 185 x 48 mm	-
Factory default IP address	DHCP configured	-
Case / CPU cooling	Compact / Fanless	-
Conformity	CE, FCC, RoHS, ErP Ready	-
Mounting	Wall / DIN rail mounting	-

HARDWARE DATA

CPU	Intel Celeron J1900 2.0 GHz Quad-Core	-
RAM	4 GB DD3L-1333	-
Hard Disk	64GB mSATA SSD	-
LAN Controller	Intel 211-AT Gigabit LAN	-

INTERFACES

USB	Nr.3 USB 2.0 ports, Nr.1 USB 3.0 port	-
LAN	Nr.2 RJ45 (1 available)	-
Video	VGA, HDMI	-

SOFTWARE APPLIANCE

ACCESS, TAG, DEVICES

Supported SENECA devices	Z-GPRS3, Z-UMTS, Z-LOGGER3, Z-PASS1, Z-PASS2, MYALARM SEAL, Z-KEY	Z-GPRS3, Z-UMTS, Z-LOGGER3, Z-PASS1, Z-PASS2, MYALARM SEAL, Z-KEY
User access	Access to multiple areas and groups, logo customization	Access to multiple areas and groups, logo customization
Device operation time monitoring	Yes	Yes
Total number of tags	Max 5000	Max 1.000 / 5.000 / 10.000

SUPERVISION

Dashboard	Yes	Yes
Synoptic	Yes	Yes
Widget	Yes	Yes
Responsivity	Yes	Yes

DATA, ALARMS, EVENTS MANAGEMENT

Real-time telemetry visualization	Yes	Yes
Historical data analysis	Yes	Yes
Events and alarm logs analysis	Yes	Yes
Data storage	Local storage database	Local storage database
Max datetime storiage	Selectable up to 10 years	Selectable up to 10 years
Data export	CSV	CSV

COMMANDS

Sending command to connected SENECA devices	Yes	Yes
Sending alarm email to phonebok	Yes	Yes

SW / OS / VIRTUAL MACHINE

Related software	SeAL, Log Factory, SDD (Seneca Discovery Device)	SeAL, Log Factory, SDD (Seneca Discovery Device)
Virtual Machine VMWare	No	Yes, mandatory
Supported browser	Google Chrome	Google Chrome
Supported media	Desktop, Tablet, Smartphone, Smart TV	Desktop, Tablet, Smartphone, Smart TV
Supported O.S.	Windows, Android, iOS	Windows, Android, iOS

CONNECTIONS

Server configuration	Yes	Yes
Static and public IP address	Yes, recommended	Yes, recommended
Connection protocols	HTTP, HTTPS, FTP	HTTP, HTTPS, FTP
API integration	Yes	Yes

ORDER CODES

Code	Description	Code	Description
CLOUD BOX	Micro Scada / Industrial IoT Box, max 5.000 tags	CLOUD BOX VM-10K	Virtual Server license for data acquisition from SeAL RTU, up to 10.000 tags
CLOUD BOX VM-D	Virtual Server for data acquisition from SeAL RTU, up to 1 demo device / 150 tags	CLOUD BOX VM-UP1	Virtual Server license upgrade for data acquisition from 1.000 to 5.000 tags
CLOUD BOX VM-1K	Virtual Server license for data acquisition from SeAL RTU, up to 1.000 tags	CLOUD BOX VM-UP2	Virtual Server license upgrade for data acquisition from 5.000 to 10.000 tags
CLOUD BOX VM-5K	Virtual Server license for data acquisition from SeAL RTU, up to 5.000 tags	CLOUD BOX VM-UP3	Virtual Server license upgrade for data acquisition from 1.000 to 10.000 tags

SENECA

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