Monitoring equipment

BACnet micro workstation server + touch operation panel

BACsoft-OWS

【Application Notes】

The BACsoft-OWS series is a mini-workstation that complies with the BACnet B-OWS feature level. This workstation completely transports the core functions of the BACsoft -AWS software into the mini-PC, so that it has the same functions as the workstation software and can be used with touch panels of various sizes. For applications such as on-site operator interface or large-scale information display, or budget-conscious miniature surveillance systems, BACsoft-OWS series products will be the best solution for you!

【Features】

- Produced in accordance with the BACnet Operator Workstation (B-OWS) communication protocol developed by the American Heating, Refrigeration and Air-Conditioning Association (ASHRAE).
- All workstations shipped have completed installation testing and adjustment, reducing various installation problems caused by traditional software installation due to different operating system environments.
- The highly freely editable graphic control layout uses the same graphic control editing environment as BACsoft-AWS, so users do not need to adapt to learn new editing methods.
- With Web server function, users can monitor remote systems through Browser.
- Can manage (Create/Delete/edit) the dynamic objects (Alarm/Schedule/Trendlog) of all BACnet devices in the system, regardless of brand.
- It has a real-time data chart interface and provides real-time display interfaces including curve graphs/pointer graphs/pie charts, etc. Users can easily create their own real-time dashboards.
- Supports 3 types of touch panels of the same size, which can be used as an on-site touch operation human-machine interface after being connected via HDMI & USB at any time.
- Users can also connect monitors of various sizes via HDMI to achieve signage applications of various sizes.
- Support BACnet IP, Ethernet; -nBP model can integrate non-BACnet information such as Modbus TCP/RTU, MQTT, API and other communication methods.
- Supports a variety of alert messaging methods (Line / Telegram / email / Whatsapp / SMS), allowing administrators to receive the latest system status no matter when and where. Provide instant messaging alarm information editing (can be used to instruct alarm recipients on subsequent handling methods/maintenance contact, etc.)
- Independent alarm sound effects can be set for each alarm. Maintenance personnel can identify the current alarm status through sound without paying close attention to the monitoring screen.
- With alarm statistical analysis function, users can freely select a certain time range/number of alarms for statistical analysis and then formulate improvement strategies.
- It has the function of creating an alarm contact list and distinguishing groups, which can be applied to time-sharing/zoned alarm sending).
- It has data analysis and processing functions, which can calculate the data in the memory and produce various charts/reports for statistical analysis.
- Data statistics has a filtering function, which can filter out unnecessary/abnormal data or periods that do not require statistics during statistics, without the need for manual filtering.
- Equipped with local alarm (Alarm) and trend log (Trendlog) objects, which can be used for alarm notification and data collection related applications.
- Has WIFI function, mobile devices such as cell phone/tablet can be connected to BACsoft-OWS via WIFI for direct system monitoring.

Monitoring equipment

BACnet micro workstation server + touch operation panel

BACsoft-OWS

【Micro Workstation Specifications】

Model	Max BACnet Device quantity	Function module number	Non-BACnet Integration Points (MQTT、API、Modbus)
BACsoft-OWS	-8	-S (Local server) -W (Cloud Server) -WB (Cloud Energy Management Server)	-N (No points required) -nBP-XS (100 points) -nBP-S (200 points) -nBP-M (500 points)

BACsoft-OWS standard: BACsoft-OWS、90° micro HDMI、DIN rail

【Operation panel specifications】

Model	Diagonal Size	resolution	Screen Ratio	Supported Colors	luminance (nits)	comparison	touch
W116	11.6”	FHD	16:9	16.7M	250	1000:1	Single Point Capacitive
W133	13.3”	FHD	16:9	16.7M	250	1000:1	Single Point Capacitive
W156	15.6”	FHD	16:9	16.7M	250	1000:1	Single Point Capacitive

【Ladder Type DIN Rail Power Supply Description】

Model	Input Voltage	Rated Power	Output Voltage
HDR-15-24	85 ~ 264VAC	15W	24VDC

*** Sample Purchase: Requires cloud server functionality and Modbus 150 point integration**
Purchase Model No.: BACsoft-OWS-8-W-nBP-S

*** The table shows the standard size specification, users can also purchase their own touch screen to match, but need to confirm the touch driver compatibility, if you have to match with your own screen or other larger size needs, please contact AIRTEK sales staff procurement or technical staff to confirm.**

◆ Power supply :

24VDC/VAC, 10VA power supply. You can choose to use HDR-15-24 power module to supply power using 85~264VAC power supply (refer to the wiring diagram).

◆ processors :

64-bit quad-core ARM Cortex-A53 (1.2GHz) with LPDDR2, 1GB and 128GB Flash SD card memory space included。

◆ Ethernet :

10/100M Ethernet with optional support for BACnet Ethernet or BACnet/IP network layer protocols。

◆ Audio/video output :

HDMI (supports rev 1.3, 1.4), multisensor terminal (supports NTSC, PAL), 3.5mm audio terminal。

◆ RS-485 :

1x RS-485 for Modbus RTU Slave integration, up to 32 devices。

◆ USB

4 USB 2.0 ports for external keyboard/mouse input devices。

◆ Environment :

0 ~ 50℃, 5 ~ 95%RH without condensation。

◆ Certification :

RoHS compliant。

Monitoring equipment

BACnet micro workstation server + touch operation panel

BACsoft-OWS

【Functionality】

◆ Flexibility :

Configurable screen size and mounting method according to application requirements.

◆ Effectivity :

Utilizes the latest processor and display technologies.

◆ Easy integration :

Provides standardized protocols for seamless integration into existing systems.

◆ Strong function :

Equipped with most of the features of BACsoft-AWS workstation.

◆ User Friendly :

Intuitive user interface and rich functionality options.

◆ Mobile Surveillance :

Mobile devices can be directly connected via network or WIFI for remote monitoring and management.

◆ Multimedia Alarm :

Real-time reporting through multiple media to get the first-hand information on system anomalies.
LINE / SMS /Whatsapp/ Telegram/ E-mail。

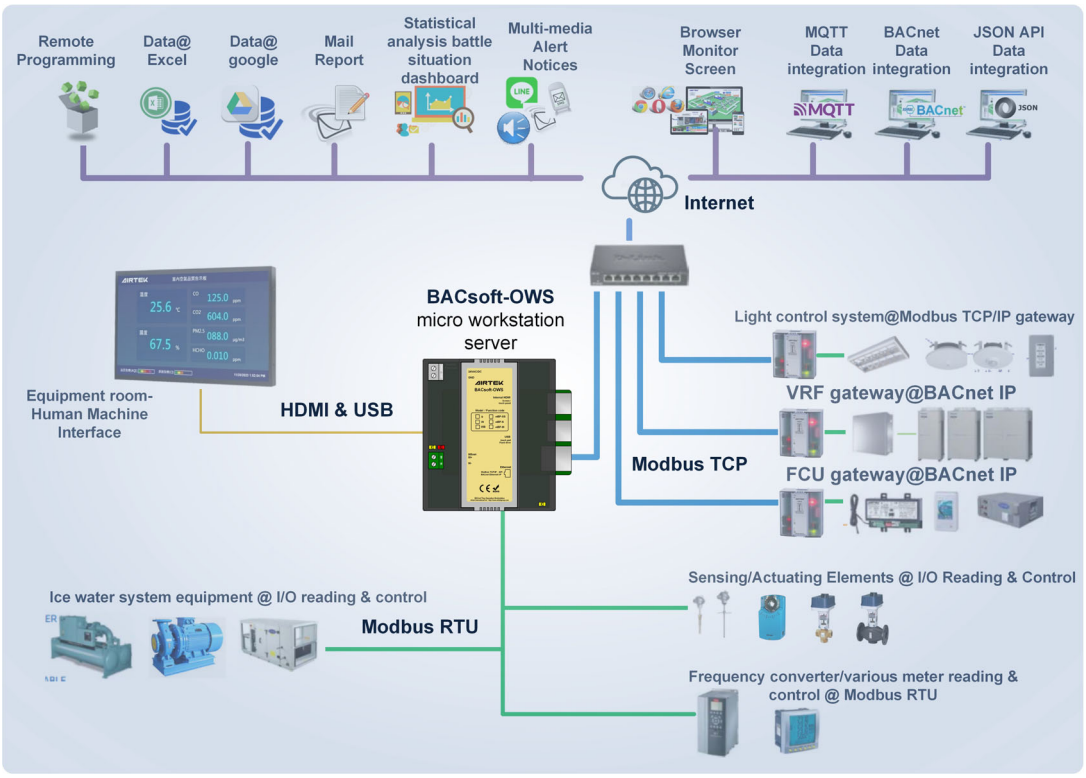
◆ Multi-format automated reports :

Excel /PDF /Customized /Timed Output & Send。

◆ Statistics and Visualization :

Data Logging / Data Cleaning & Statistics / Diversity Chart Support。

【Network Diagram】

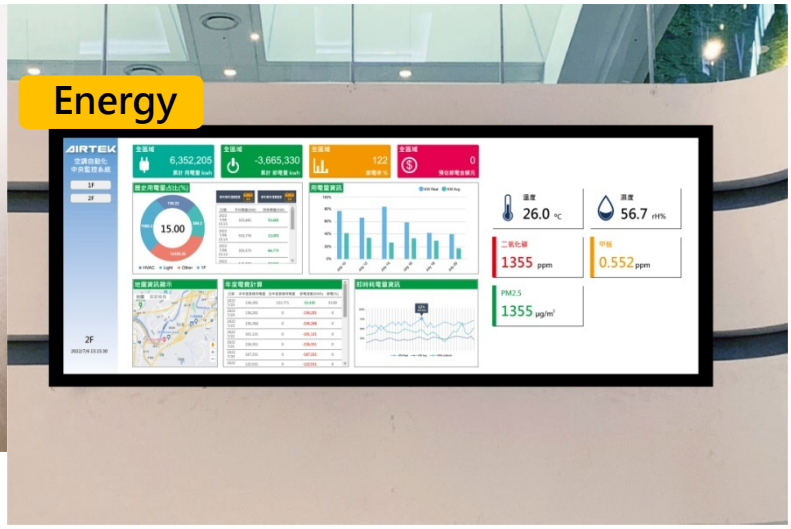


Monitoring equipment

BACnet micro workstation server + touch operation panel

BACsoft-OWS

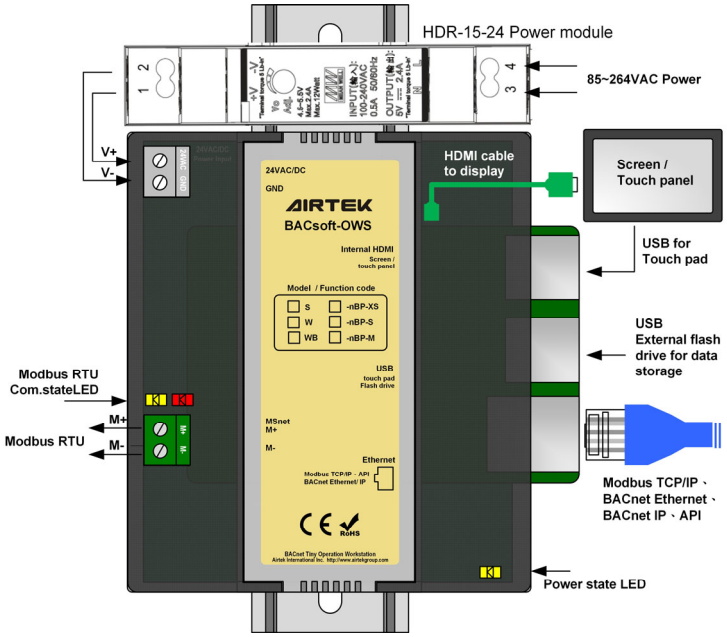
【Application Examples】

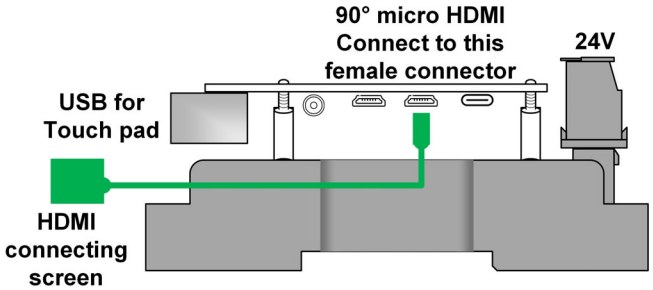


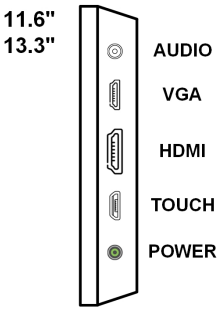
【Various Charts】

【Workstation Installation & Wiring Instructions】

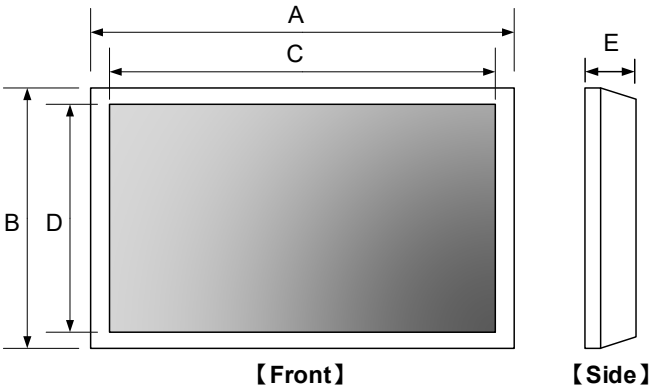
◆ The power supply must be from a separate transformer, not shared with other controllers or converters, to avoid short circuiting of the power supply, which may cause the controller to burn out.

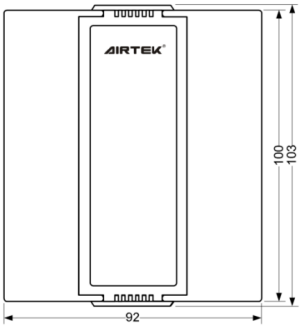


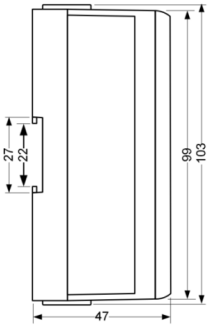




【Size】Unit：mm







Model	A	B	C	D	E
W116	284.65	182.25	257.30	145.40	29.5
W133	329.5	207.9	294.5	165.9	22.5
W156	386.6	231.7	344.2	193.6	16.6