WOODWARD

easYview

mini-SCADA visualization solution

DESCRIPTION

Woodward's easYview is a family of visualization touch-panels designed for system level visualization. It is customized to provide users a mini-SCADA visualization solution for a fleet of gensets controlled by Woodward power management controllers. It is particularly useful for switchgear builders, genset packagers and system integrators as an off-the-shelf HMI option for any application where a secure remote control, monitoring, and visualization are desired such as hospitals, data centers, offshore rigs, landfill, rental, and wastewater gas-to-power applications to name a few.

easYview is available in three display sizes keeping the digital core constant but expanding the touch display from small (7") and medium (10") to large (15") screens. Combined with a versatile atvise® SCADA software tool, it makes an excellent plant level visualization system as device connections (easYgen-XT family and LS-6XT to start with) are already made and data structure is already set-up to help minimize your engineering effort while providing flexibility that is expected from a scalable platform. VNC is supported across the easYview family for detailed connection to single controllers making it ideal not only for commissioning and troubleshooting your PowerGen assets but also for operating and maintaining them later. Additionally, extended operating temperature range combined with strict ingress protection, wide viewing angle, anti-glare treatment and strong Luminance makes it as good for outdoor use as for indoor installations.

Features

- Off-the-shelf easYview supports two operation modes,
  - mini-SCADA – multiple easYgen-XT and/or LS-6XT connects via Modbus TCP connection. 4 each controller type prepared for 7" model and 8 each prepared for 10" and 15" models.
  - remoteHMI – VNC connection to single controllers. Depending upon the easYview screen size (7', 10' or 15'), 1, 2 or 4 different remote HMI screens can be shown simultaneously
- Engineered to achieve a range of customizations using tunables and online keyboard
- Further customization using atvise® SCADA tool under password protection (see AN#37949)
- PC mode to free the license from easYview Hardware and perform customizations using a PC
- VNC connection also supported in mini-SCADA mode for detailed visualization of single controllers
- Possible to connect multiple easYview to single controllers in remoteHMI mode
- List of available devices in network with a search filter option
- Auto connection setting to the last connected device(s)
- Customizable remoteHMI connection in full mode, annunciator mode or deactivate
- Neutral bezel and field replaceable Logos for customer branding (see AN#37946)
- Multi-lingual remoteHMI screens of the connected controller

- **Engineered for Woodward Power Management controls to save on field engineering**

- **Two operation modes:**

  1. **mini-SCADA: connect multiple controllers to visualize system level performance**

  2. **remoteHMI: detail connections to single controllers**

- **Connect one easYview to many controllers in mini-SCADA mode or one controller to many easYview in remoteHMI mode**

- **Achieve considerable customizations by tunables only**

- **Full customization using a versatile atvise ® SCADA tool**

- **Offers on-the-fly configuration with same security levels as the connected control**

- **Simplifies wiring to the access door and keeps high voltage connections remote**

- **Ethernet communication to the connected control**

- **Personalization by end user**

- **CE Marked, UL Listed**

*atvise® is a registered trademark of Bachmann Visutec GmbH

SPECIFICATIONS

Power supply   24 Vdc ± 20%
  Intrinsic consumption....................................typical 9 W; maximum 21W
  Ambient temperature (operation)....................-20 to 60 °C (-4 to 140 °F)
  Ambient temperature (storage).....................-30 to 70 °C (-22 to 158 °F)
  Ambient humidity ....95% RH@40 °C, non-condensing
Housing   Front panel and VESA mounting
  …Die-cast aluminum alloy front bezel Metal Shell
  Front   …………….……………….true-flat insulating surface
  Weight   ... 7": 2kg (4.44lb), 10": 3.9kg (8.63lb), 15": 4.1kg (13.15lb)
  Sealing   Front ....IP66 (with clamp fastening)
  Connection (power supply)........................ screw/plug terminals 1.5 mm²
  Interface (others not used) ....Ethernet
System Hardware
  CPU ....NXP® ARM® Cortex™-A53 i-MX 8M
  ....Mini quad-core 1.6 GHz processor
  Backup Memory... FRAM 1 MB
  Memory....................................Quad core: 2 GB DDR4 RAM
  Storage ....16GB eMMC

Software
  Operating System .... Linux
  Application   ....mini-SCADA: atvise®
  .... remoteHMI: VNC
Display
  Type...P-CAP TFT LCD
  Max. Colors...16M
  Viewing Angle (H/V) 170/170
  Backlight Life ....LED; 50,000 h
  Brightness adjustable .... yes
  Treatment………………………………………………..Anti-glare
  Contrast Ratio 800:1
Touch Screen
  Touch points ....10 Points
  Light...Transmission Above 85%
  Pencil hardness .... >=7H
Vibration protection .... Operating, random vibration 2 Grms (5 to 500 Hz)
Shock protection ……….………………….10G shock under 11ms operation
Disturbance test (CE)............ tested according to applicable EN guidelines
Listings   .... CE, UL, FCC Class A

DIMENSIONS (in mm)

easYview-07-030

SUPPORT VESA 100x100mm

Cut Out: 192.4 x 139.0mm, R=5.0mm. (±0.5mm)

easYview-10-060

SUPPORT VESA 100x100mm

Cut Out: 274.1 x 193.3mm, R=5.0mm. (±0.5mm)

easYview-15-150

SUPPORT VESA 100x100mm

Cut Out: 411.9 x 261.2mm, R=5.0mm. (±0.5mm)
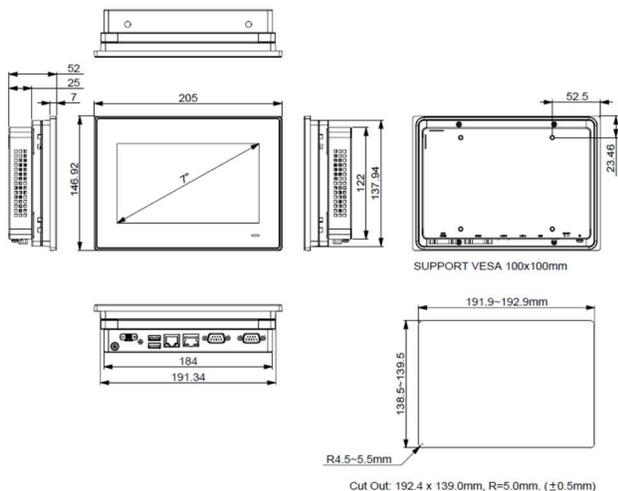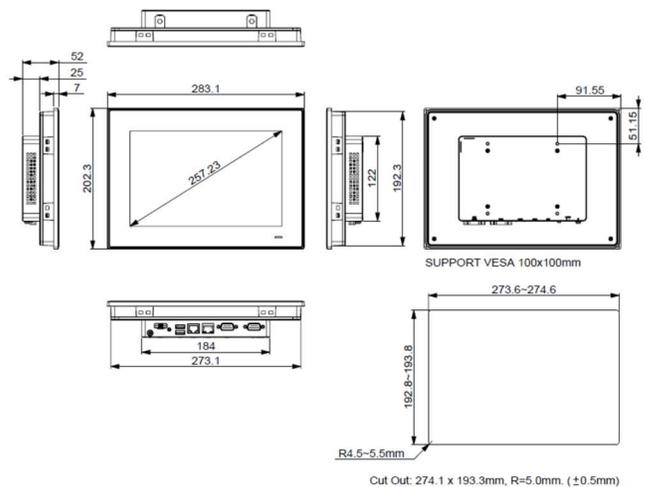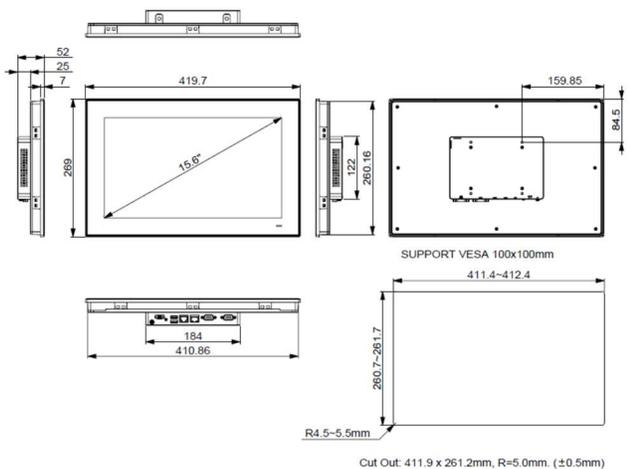
LED Indicator

LED Indicator
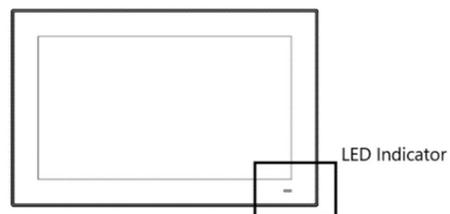
Off – "dark"
ON – "Blue"
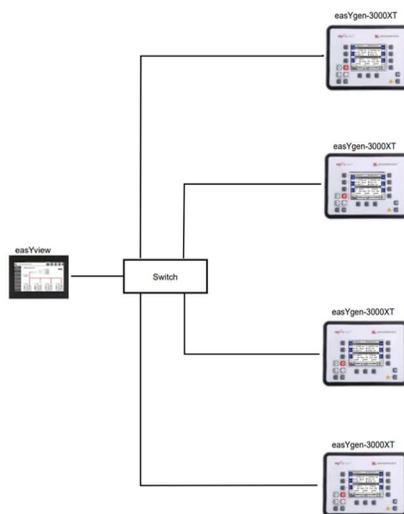**Standby – "Orange"**

TERMINAL DIAGRAM

Only Power Input and LAN A are used for easYview

Other interfaces are not used for this application!

Power Input terminal:
Low voltage / Limited Energy power source

APPLICATION OVERVIEW

The easYview comes prepared with two basic application modes: a Remote HMI mode and a mini-SCADA mode.

- In the Remote HMI mode, the easYview connects to one or more devices via VNC connection and receives the Remote HMI screens of the connected easYgen-XT or LS6-XT devices. Depending upon the easYview screen size (7', 10' or 15'), 1, 2 or 4 different remote HMI screens can be shown simultaneously. This mode is suitable for detailed connection to a single controller and helps doing troubleshoot, commission, parametrize, Alarm/event log etc.

- In the mini-SCADA mode, the easYview connects to multiple easYgen-XT or LS6-XT devices via Modbus TCP connection and offers a plant level visualization. This mode is designed to keep operators informed during regular operation and maintenance to visualize most frequent / favorite values often from system perspective without going into details. The mini-SCADA mode also has a built-in Remote HMI capability.

Off-the-shelf easYview comes prepared with 4 easYgen-3000XT controllers in island or utility parallel operation. Tunables are available for customizations such as, deleting an easYgen, changing color of live bus bar, changing utility source etc. However, for any major customization such as adding an easYgen-XT, LS-6XT or 3rd party device, adjusting single line diagram, etc, an atvise® Builder tool is required.

For more information contact:

FEATURES OVERVIEW

Model	easYview-07-030	easYview-10-060	easYview-15-150
HMI			
Display type	WSVGA TFT LCD	WXGA TFT LCD	FHD TFT LCD
Display size	7"	10.1"	15.6"
Max. resolution	1024 x 600	1280 x 800	1920 x 1080
Luminance (cd/m^2)	425	500	450
mini-SCADA			
Concurrent connected data points (CCD)	30	60	150
Mirror nodes	1500		
Built-in support (#easYgen-XT / #LS-6XT) [1]	4/4	8/8	8/8
remoteHMI			
# Simultaneous remoteHMI connection (sum easYgen-XT and LS-6XT)	1	2	4
Cascaded remoteHMI [2]		✓	
Based on VNC		✓	
Switch application modes (mini-SCADA / remoteHMI)		✓	
Listings/Approvals			
UL Listing		✓	
FCC Class A		✓	
CE Marked		✓	
Hardware	**P/N:**		
Plastic housing with Die-cast aluminum alloy front bezel and display (front panel / VESA mounting)	**8446-1071**	**8446-1072**	**8446-1073**
Mounting KIT with 10 clamps and screws (This is spare part, one kit delivered with the unit for fastening)	10-052-842		

[1] No Tool but only configuration required for up to 4 easYgen-XT support. Further eaYgen-XTs and/or LS-6XT requires minor adjustments with atvise builder tool.
[2] One easYview (master) establishes connection with up to 5 controllers (running VNC server). Up to 9 easYview (slave) connects to easYview (master). The RemoteHMI screens can be same or different on master and slave easYview.

Related Products
- Genset control **easYgen-3100XT/3200XT-P1**   Product Specification (# 37582)
- Genset control **easYgen-3400XT/3500XT-P1/P2**   Product Specification (# 37583)
- Circuit breaker control **easYgen | LS-6XT**   Product Specification (# 37913)

Product Documentation
- easYview   Technical Manual (# 37945)
- Genset control **easYgen-3100XT/3200XT-P1**   Technical Manual (# 37574)
- Genset control **easYgen-3400XT/3500XT-P1**   Technical Manual (# 37580)
- Genset control **easYgen-3400XT/3500XT-P2**   Technical Manual (# 37581)
- Circuit breaker control **easYgen | LS-6XT**   Technical Manual (# 37914)
- Personalization (logo, boot-up screen)   Application Note (#37946)
- Customization (add new page, new device)   Application Note (#37949)

Product Documentation site, http://wwdmanuals.com/easyview