IQVIEW7, 10, 15, 21
HTML5 Touchscreens for IQX

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Description

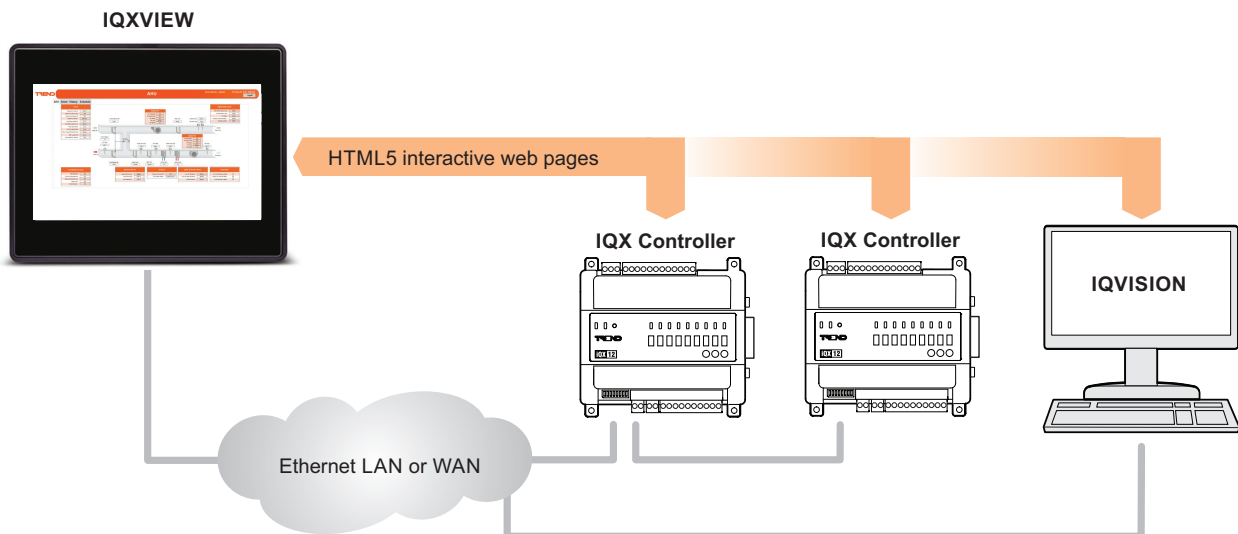IQVIEW comprises a range of TFT colour touch displays running an embedded web browser.

The integrated Gigabit Ethernet interface enables the IQVIEW to display HTML5 web pages served up by a local or remote IQX controller or IQVISION supervisor. This allows the IQVIEW to provide full user interaction with building management systems.

Supplied fixings allow the display to be securely installed into control panels or enclosures.
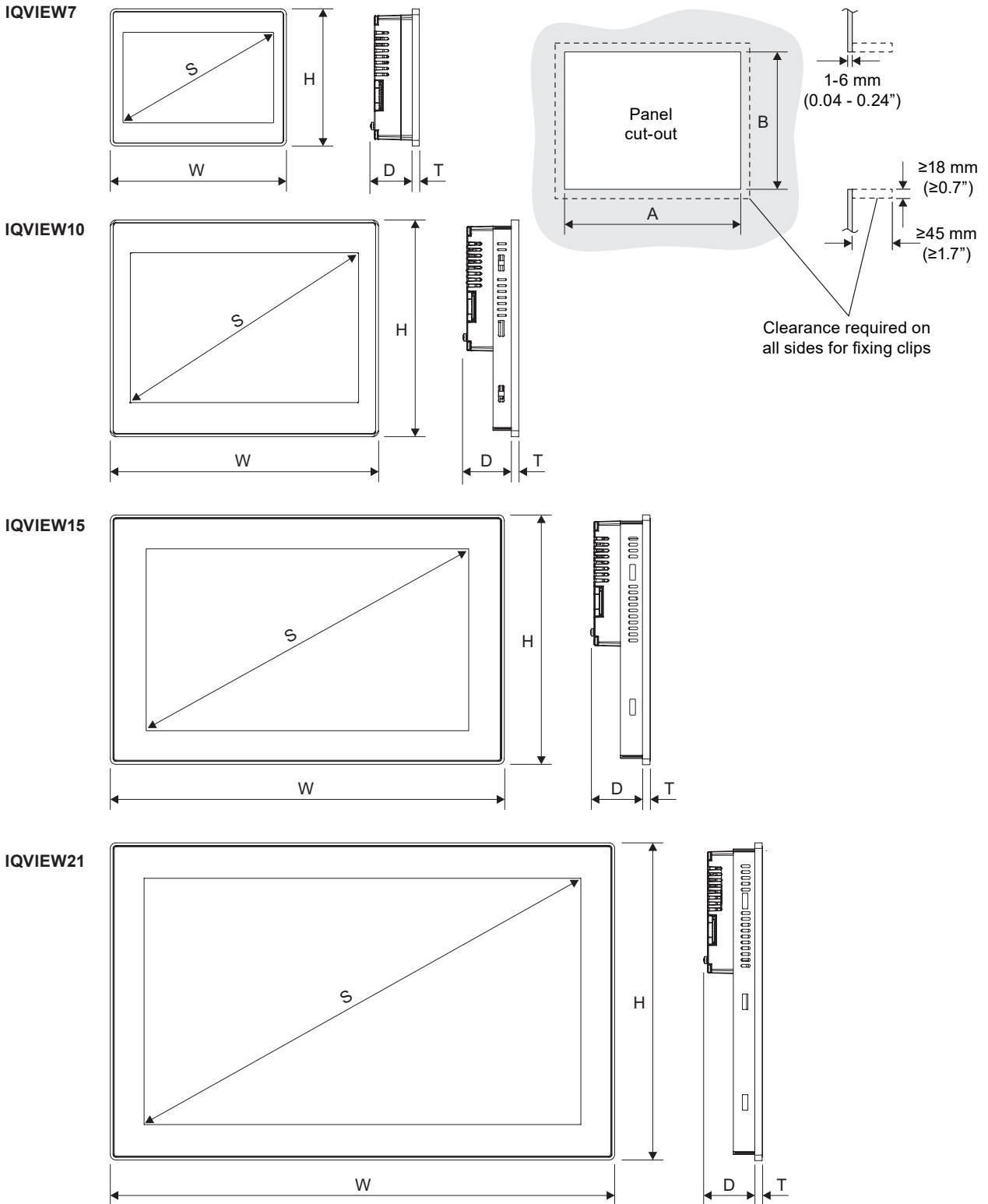
Features

- Available in 7", 10", 15" and 21" screen sizes.
- Up to 1920x1080 (full HD) resolution with 21" screen.
- 16M colours.
- Dimmable LED backlight.
- HTML5 web browser.
- Capacitive touchscreen with multi-touch operation.
- Integrated Gigabit Ethernet.
- IP66 rating from front.
- 24 Vdc SELV (safety extra low voltage) operation.
- Washable front panel.

System Overview

DIMENSIONS

IQVIEW7

IQVIEW10

IQVIEW15

IQVIEW21

Panel cut-out

1-6 mm (0.04 - 0.24")

≥18 mm (≥0.7")

≥45 mm (≥1.7")

Clearance required on all sides for fixing clips

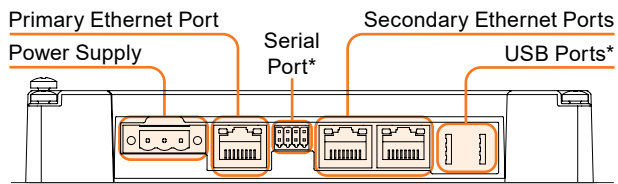| Model	Screen Size (S)	Dimensions (mm)						Dimensions (inches)					
		W	H	D	T	A	B	W	H	D	T	A	B
IQVIEW7	7"	187	147	47	9.5	176	136	7.36	5.79	1.85	0.37	6.93	5.35
IQVIEW10	10.1"	282	197	56	9.5	271	186	11.10	7.80	2.20	0.37	10.67	7.32
IQVIEW15	15.6"	422	267	56	9.5	411	256	16.60	10.50	2.20	0.37	16.18	10.00
IQVIEW21	21.5"	552	347	56	9.5	541	336	21.70	13.66	2.20	0.37	21.30	13.23

HARDWARE

The IQVIEW is designed to be mounted in a lockable panel or enclosure that provides a degree of protection not less than IP54 in accordance with IEC/EN 60079-15. A suitable aperture must be cut in the panel, the display is then inserted from the front and secured from behind using the screw clips supplied.

When correctly installed the IQVIEW provides a protection rating of IP66 from the front.

The IQVIEW can be installed and configured to operate in either landscape or portrait mode.

CONNECTIONS

Connections are made to the rear of the IQVIEW once it has been mounted in position. Secure access to the rear of the display must, therefore, be provided.

Primary Ethernet Port   Secondary Ethernet Ports
Power Supply   Serial   USB Ports*
                      Port*

* The 8-pin serial connector is reserved for future use. The USB ports may be used for connection of a keyboard and/or mouse.

Power Supply

The IQVIEW requires a 24 Vdc supply (10 to 32 Vdc). A range of suitable DIN rail mounted power supplies is available separately - please refer to the DCPSU-24 Data Sheet (EN0B-0736).

Connection to the IQVIEW is made using the 3-way screw-terminal plug supplied. The unit must always be earthed/grounded. An earth connection must be made using the screw terminal located near the power supply terminal block. Terminal 3 on the power supply connector must also be connected to earth. The PSU must be rated for the specified inrush current.

Ethernet Port

The primary Ethernet port is used to connect IQVIEW to a hub, switch or router, giving access to a LAN or WAN, or directly to an IQX. Connection is made using a standard Cat 5 cable, terminated with an RJ-45 plug, and up to a maximum length of 100m. The secondary ports can be configured to provide an Ethernet bridge to the primary port, e.g. to extend the network.

CONFIGURATION

On first power-up the IQVIEW must be configured with the required URL/IP Address of the remote web server. If needed, the default Ethernet port settings can also be changed. Please refer to the IQVIEW7, 10, 15, 21 Configuration Manual (TE201456) for further details.

INSTALLATION

The IQVIEW is designed to be mounted in a lockable panel or enclosure that provides a degree of protection not less than IP54. The installation procedure involves:

Choose a suitable location
Cut a suitable aperture in the panel/enclosure
Secure the display to the panel/enclosure
Install and connect the power supply

Connect the Ethernet cable
Power up the display
Configure the panel settings

Full instructions for mounting and electrical connections are available in the IQVIEW7, 10, 15, 21 Installation Instructions (TG201455). Details of setting up the panel are available in the IQVIEW7, 10, 15, 21 Configuration Manual (TE201456). Both documents can be downloaded from the Trend PNet e-library (https://partners.trendcontrols.com).

COMPATIBILITY

Controllers: IQX.

Supervisor: IQVISION.

FIELD MAINTENANCE

Do not allow layers of dust or other contaminates to form on the front panel of the IQVIEW: it must be cleaned regularly with a soft cloth and neutral soap product. Do not use solvents.

Disconnect power before carrying out any cleaning.

⚠️ **WARNING:** Contains no serviceable parts. Do not attempt to open the unit. Failure to comply may cause damage to the unit.

DISPOSAL

COSHH (Control of Substances Hazardous to Health - UK Government Regulations 2002) ASSESSMENT FOR DISPOSAL OF IQVIEW . The only part affected is the lithium battery (on the battery option board) which must be disposed of in a controlled way.

RECYCLING ♻.
All plastic and metal parts are recyclable. The printed circuit board may be sent to any PCB recovery contractor to recover some of the components for any metals such as gold and silver.

WEEE Directive:

At the end of their useful life the packaging and product (including the battery) should be disposed of by a suitable recycling centre.

Do not dispose of with normal household waste.
Do not burn.

ORDER CODES

IQVIEW7-24VDC	7" TFT capacitive touchscreen display, 24 Vdc
IQVIEW10-24VDC	10" TFT capacitive touchscreen display, 24 Vdc
IQVIEW15-24VDC	15" TFT capacitive touchscreen display, 24 Vdc
IQVIEW21-24VDC	21" TFT capacitive touchscreen display, 24 Vdc
DCPSU-24-1.3	24 Vdc power supply, input:100-240 Vac, output:24 Vdc 1.3 A
DCPSU-24-2.5	24 Vdc power supply, input:100-240 Vac, output:24 Vdc 2.5 A
DCPSU-24-4	24 Vdc power supply, input:100-240 Vac, output:24 Vdc 4 A

SPECIFICATION

ELECTRICAL

Power Supply	24 Vdc (10 to 32 Vdc)
Current Consumption (maximum @ 24 Vdc)	
IQVIEW7	0.7 A (typical), 1.3 A (inrush)
IQVIEW10	1.0 A (typical), 2.0 A (inrush)
IQVIEW15	1.2 A (typical), 2.4 A (inrush)
IQVIEW21	1.7 A (typical), 3.4 A (inrush)

Note: The PSU must be rated for the specified inrush current.

Input Protection	Electronic
Real-time Clock	Date /Time (NTP compatible)
Backup method	Rechargeable lithium battery (not user-replaceable);
Backup duration	3 months at 25°C
CPU (all variants)	ARM Cortex-A53 i.MX8M Mini Quad
Operating System	Linux RT
Memory (all variants)	4 GB (flash), 2 GB (RAM)
Ethernet	Port 0: 10/100/1000; Port 1/2: 10/100

DISPLAY

Type	TFT Touchscreen True Glass Projected Capacitive, Multitouch
Screen Size / Resolution / Format	
IQVIEW7	7" / 800x480 / WVGA 5:3
IQVIEW10	10.1" / 1280x800 / WXGA 16:10
IQVIEW15	15.6" / 1366x768 / WXGA 16:9
IQVIEW21	21.5" / 1920x1080 / full HD 16:9
Colour Depth	24 bit (16 million colours)
Display Adjustments	Brightness, orientation
Brightness (typical)	
IQVIEW7	500 Cd/m^2
IQVIEW10	500 Cd/m^2
IQVIEW15	400 Cd/m^2
IQVIEW21	300 Cd/m^2
Backlight Type	LED
Timeout period	1 to 60 minutes, or always on
Typical life*	>40,000 hours

* Continuous operation until the backlight brightness reaches 50% of the rated value at 25°C ambient air temperature. Extended use in ambient temperatures of 40°C or higher may degrade backlight quality/reliability/durability.

MECHANICAL

Overall Dimensions (W x H x D) - see page 2 for full details	
IQVIEW7	187 x 147 mm (7.36 x 5.79")
IQVIEW10	282 x 197 mm (11.10 x 7.80")
IQVIEW15	422 x 267 mm (16.60 x 10.50")
IQVIEW21	552 x 347 mm (21.70 x 13.66")
Panel Cut-out Required	
IQVIEW7	176 x 136 mm (6.93 x 5.35")
IQVIEW10	271 x 186 mm (10.67 x 7.32")
IQVIEW15	411 x 256 mm (16.18 x 10.00")
IQVIEW21	541 x 336 mm (21.30 x 13.23")
Weight	
IQVIEW7	1.5 kg (3.30 lbs)
IQVIEW10	2.5 kg (5.51 lbs)
IQVIEW15	4.1 kg (9.04 lbs)
IQVIEW21	6.1 kg (13.45 lbs)

Connectors

Power Supply Input	
Type	2 part connector (0.2" pitch) with rising cage clamp screw terminals.
Cable size	1.3 mm^2 (14 AWG) minimum, 2.5 mm^2 (12 AWG) maximum.
Ethernet Port	
Type	RJ-45.
Cable type	Cat 5e, UTP (unshielded twisted pair).
Cable length	100 m (109 yds) maximum.

ENVIRONMENTAL

Ambient Limits	
Storage temp	-20 to +70°C (-4 to 158°F)
Storage humidity	5-85% RH, non condensing
Operating temp	-20 to +60°C (-4 to 140°F)
Operating humidity	5-85% RH, non condensing
Protection Class	IP66 (front), IP20 (rear) Type: 12, 4X
Pollution Degree	2 (as defined in IEC/EN 60664-1)
Approvals	
CE	Emission: EN 61000-6-4 Immunity: EN 61000-6-2 for installation in industrial environments
RCM	Yes

Note: The front glass has chemical resistance to the following substances for up to 24 hours without visible changes: Betadine (10% Povidone Solution), Cola, Electrode Gel/Paste, Hydrogen Peroxide (3% Solution), NaCl (0.9% Solution), Coffee, Dextrose (5% Glucose Solution), Hydrogen chloride (0.5% Solution PH=1), Isopropyl Alcohol, Sodium Hypochlorit, Ethyl Alcohol (70%-90%), Quaternary ammonium compound.

Please send any comments about this or any other Trend technical publication to techpubs@trendcontrols.com

Trend Control Systems Limited
St. Mark's Court, North Street, Horsham, West Sussex, RH12 1BW, UK. Tel: +44 (0)1403 211888, www.trendcontrols.com