TPS-15G-QM-L

Isys® G-Series 15" Wall Mount Touchpanel w/QuickMedia™ Transport Technology

Crestron's Isys G-Series touchpanels deliver a higher level of performance with dual-window video, RGB, and HDTV display to meet the demands of today's sophisticated control and automation applications. Incorporating modern styling in a versatile flush mount design, the Isys TPS-15G-QM-L features a spectacular 15" XGA display offering a wide viewing angle with exceptional brightness and contrast for stunning control graphics, high-resolution images, and full-motion HD video.

Crestron touchpanels offer an ideal user-interface for multimedia presentation, videoconferencing, home automation, and much more, providing a wide-open canvas for the creation of custom control screens tailored to the needs of the end-user. Touchpanels do away with piles of remote controls, cryptic control panels and cluttered wall switches, simultaneously expanding and simplifying control over a broad range of complex devices and systems.

Isys®
Isys power and beauty are infused throughout Crestron's entire touchpanel lineup. Under the hood, the TPS-15G-QM-L offers vibrant 24-bit color depth with 8-bit alpha channel transparency to produce incredible 3D graphics and high-res images. The Isys engine supports dynamic graphics and text, full-motion animations, multimode objects, and PNG translucency - all with astonishing speed.

Synapse™
Crestron's exclusive Synapse Image Rendering Algorithm enables system programmers to produce amazing graphics - faster and easier. Advanced antialiasing delivers crisper, sharper objects and text. Enhanced 3D effects add new depth and style. And because Synapse is native to the touchpanel, memory requirements and upload time are substantially reduced.

Dual-Window HD Video and RGB[2]
The TPS-15G-QM-L can simultaneously display two fully-scalable, full-motion video windows, each supporting standard video, HDTV, and high-resolution RGB signals from external AV and computer sources. Discrete video scalers with motion adaptive deinterlacing bring out the highest detail, minimizing visible scan lines and motion artifacts for a truly remarkable picture. Advanced gamma correction and built-in time base correction ensure accurate color reproduction and a jitter-free image.

Touch-the-PC
Crestron's exclusive "Touch-the-PC" technology allows real-time touchpanel navigation of any Windows PC through a direct high-speed serial connection.

Built-in Annotation
Built-in annotation capability allows presenters to write or draw over computer and video images on the touchscreen using a finger or stylus, and output the image live for audience display.

High-Quality Audio[2]
The high-powered biamplified speaker system provides amplification for external AV sources, and supports intercom functionality in combination with the integrated microphone. Customized WAV files can be loaded on the touchpanel to add dimension to the touchscreen graphics with personalized sounds, button feedback, and voice prompts.

QuickMedia™
All audio and video connections are facilitated using Crestron's revolutionary QuickMedia transport, providing a flexible yet remarkably simple wiring solution. Through QuickMedia (QM), the TPS-15G-QM-L interfaces directly with other QM-based products using inexpensive CAT5e type cable.

The two QM Input ports each support non-interlaced RGB up to 1600 X 1200 pixels, as well as composite, S-Video, and component video signals. QM Input #1 includes software-adjustable compensation for cable runs up to 450 feet; Input #2 allows up to 300 feet for video and HDTV, and shorter distances for RGB computer signals. Both QM Inputs receive audio signals from external microphone and stereo line level sources.

The QM Output port allows RGB output of the touchpanel screen image to feed a display device for audience presentation. A 24-bit digital audio signal is also present for distribution of the internal microphone signal.

High-Speed Connectivity
Both Cresnet and high-speed Ethernet are standard on the TPS-15G-QM-L, providing for easy network integration and seamless communications with Crestron control systems. USB connectivity is also included for connection of an external mouse, touchscreen, or similar pointing device[1].

Versatile Flush Mount Design
The TPS-15G-QM-L is designed for easy flush-mount installation in a wall, lectern or similar flat surface. A variety of mounting accessories is offered including optional back box and 19" rack mount kit. Five backlit pushbuttons are also provided, allowing for quick access to commonly used functions.

> 15" active matrix touchscreen display | 1024 x 768 resolution

> 24-Bit Isys graphics | Synapse image rendering algorithm

TPS-15G-QM-L

> Dual-window full-motion video, HDTV and RGB display[2]

> Built-in biamplified speaker system and microphone[2]

> QuickMedia AV connectivity | audience presentation output[2]

> High-speed Ethernet and Cresnet communications

> Built-in real-time annotation

> Backlit "Softkey" pushbuttons

> Wall, lectern, and rack mounting options

> Available in black or white

SPECIFICATIONS

Touchscreen Display

Display Type: TFT Active matrix color LCD
Size: 15 inch (38.1 cm) diagonal
Aspect Ratio: 4:3 XGA
Resolution: 1024 x 768 pixels
Brightness: 350 nits (cd/m^2)
Contrast: 700:1
Color Depth: 24-bit, 16.7M colors
Illumination: Backlit fluorescent
Viewing Angle: ±85° horizontal, ±85° vertical
Touchscreen: Resistive membrane

Processor

CPU: 32-bit Freescale ColdFire® Microprocessor

Memory

DDR RAM: 128 MB
Flash: 64 MB
Compact Flash: Accepts up to 4GB Type II CF (not included)
Maximum Project Size: 160 MB

Graphic Engine

Isys engine, 24-bit non-palette graphics + 8-bit alpha channel transparency, 16.7 million colors, Synapse image rendering algorithm, multi-mode objects, dynamic graphics, PNG translucency, full-motion (60 fps) animation, transition effects, color key video windowing

Ethernet

10BaseT/100BaseTX, auto-switching, auto-negotiating, full/half duplex, TCP/IP, UDP/IP, CIP, IEEE 802.3U compliant

Video/RGB*

Signal Types : RGB and auto-detecting composite, S-Video, or component video
Formats: SDTV 480i (NTSC) & 576i (PAL), EDTV 480p & 576p, HDTV 720p & 1080i; RGB(VGA) up to UXGA 1600 x 1200
Color Depth: 24-bit, 16.7M colors
Features: Dual-window each scalable to full-screen, time base correction, gamma correction, line doubling, motion adaptive deinterlacing, reverse 3:2/2:2 pulldown

Audio*

Hardware Features: Built-in microphone and biamplified speakers, stereo headphone output, internal volume control and audio mixer
Audio Feedback (WAV): 8-bit PCM, mono, 8 kHz sampling rate
D-A Conversion (QM): 24-bit, 48 kHz

Amplification: Biamplified, mono, 5 Watts for high-frequency, 5 Watts for low-frequency

Buttons

(4) Backlit "softkey" buttons, programmable
(1) Backlit hard reset button, reboots the touchpanel

Connectors

QM IN 1 : (1) 8-wire RJ45 female, QuickMedia input port;
Signal Types: Dynamically configurable under system control as:
- (1) RGB (VGA) input with stereo program audio and (2) mic channels, or
- (1) Auto-detecting component (YPbPr), S-Video (Y/C), or composite video input with stereo program audio and (2) mic channels;

RGB Format: RGBHV;
RGB Input Resolution, Non-interlaced: 640 x 480 minimum to 1600 x 1200 maximum (60 Hz limit at 1600 x 1200);
Video/HDTV Formats: 480i (NTSC), 576i (PAL), 480p, 576p, 720p and 1080i;
Horizontal Frequency: 15 to 100 kHz;
Vertical Frequency: 50 to 85 Hz;
Delay Skew Compensation: 0 - 22 nS;
Connects to QM output port of a **QM-TX** or other QuickMedia device via **CRESCAT-QM** or **CRESCAT-IM** cable;
Maximum Cable Length: 450 ft (aggregate distance from QM origination)

QM IN 2 : (1) 8-wire RJ45 female, QuickMedia input port;
Signal Types: Dynamically configurable under system control as:
- (1) RGB (VGA) input with stereo program audio and (2) mic channels, or
- (1) Auto-detecting component (YPbPr), S-Video (Y/C), or composite video input with stereo program audio and (2) mic channels;

RGB Format: RGBHV;
RGB Input Resolution, Non-interlaced: 640 x 480 minimum to 1600 x 1200 maximum (60 Hz limit at 1600 x 1200);
Video/HDTV Formats: 480i (NTSC), 576i (PAL), 480p, 576p, 720p and 1080i;
Horizontal Frequency: 15 to 100 kHz;
Vertical Frequency: 50 to 85 Hz;
Delay Skew Compensation: none;
Connects to QM output port of a **QM-TX** or other QuickMedia device via **CRESCAT-QM** or **CRESCAT-IM** cable;
Maximum Cable Length (Video/HDTV) : 300 ft (aggregate distance from QM origination);
Maximum Cable Length (RGB @ 60Hz): 216 ft for 640x480, 140 ft for 800x600, 84 ft for 1024x768, 70 ft for 1280x768, 30 ft for 1600x1200 (using **CRESCAT-QM** or **CRESCAT-IM** cable)

QM OUT 1 : (1) 8-wire RJ45 female, QuickMedia output port containing RGB (same as touchscreen), WAV file audio, and internal microphone signals;
RGB Format: RGBHV;
RGB Output Resolution, Non-interlaced: 1024 x 768 pixels @ 60Hz;
Connects to QM input port of any QuickMedia device via **CRESCAT-QM** or **CRESCAT-IM** cable
HEADPHONES: (1) 3.5 mm TRS mini phone jack;
Output Power: 12mW per channel;
Minimum Impedance: 32 ohms
RS-232: (1) 6-pin RJ11 female;
Computer console, touch output, or mouse/touch input port[1];
Bidirectional RS-232 up to 115.2k baud;
Hardware and software handshaking support
LAN: (1) 8-wire RJ45 with 2 LED indicators;
10BaseT/100BaseTX Ethernet port;
Green LED indicates link status;
Yellow LED indicates Ethernet activity

TPS-15G-QM-L

24VDC: (1) 2.1mm barrel DC power jack;
Do not use
NET: (1) 4-pin 3.5mm detachable terminal block;
Cresnet Slave Port, connects to Cresnet control network
USB: (2) USB Type A female;
USB 1.1 ports for mouse or touchscreen input[1]
GND: (1) 6-32 screw, chassis ground lug
MEMORY EXP. : (1) Type II Compact Flash card slot for memory expansion
PC CARD A - B : (2) Type II PC Card slots (reserved for future applications)[1]

Power Requirements

Cresnet Power Usage : 75 Watts (3.13 Amps @ 24 Volts DC)
Note: 24VDC jack should not be used.

Environmental

Temperature: 41° to 113°F (5° to 45°C)
Humidity: 10% to 90% RH (non-condensing)

Enclosure

Construction: Metal, flush mountable, 9U 19" rack-mountable (all mounting kits sold separately)
Front Bezel : Injection-molded plastic; black w/silver or white w/gray accent

Dimensions

Height: 13.59 in (34.52 cm)
Width: 14.17 in (35.99 cm)
Depth: 3.80 in (9.66 cm)

Weight

9.8 lbs (4.4 kg)

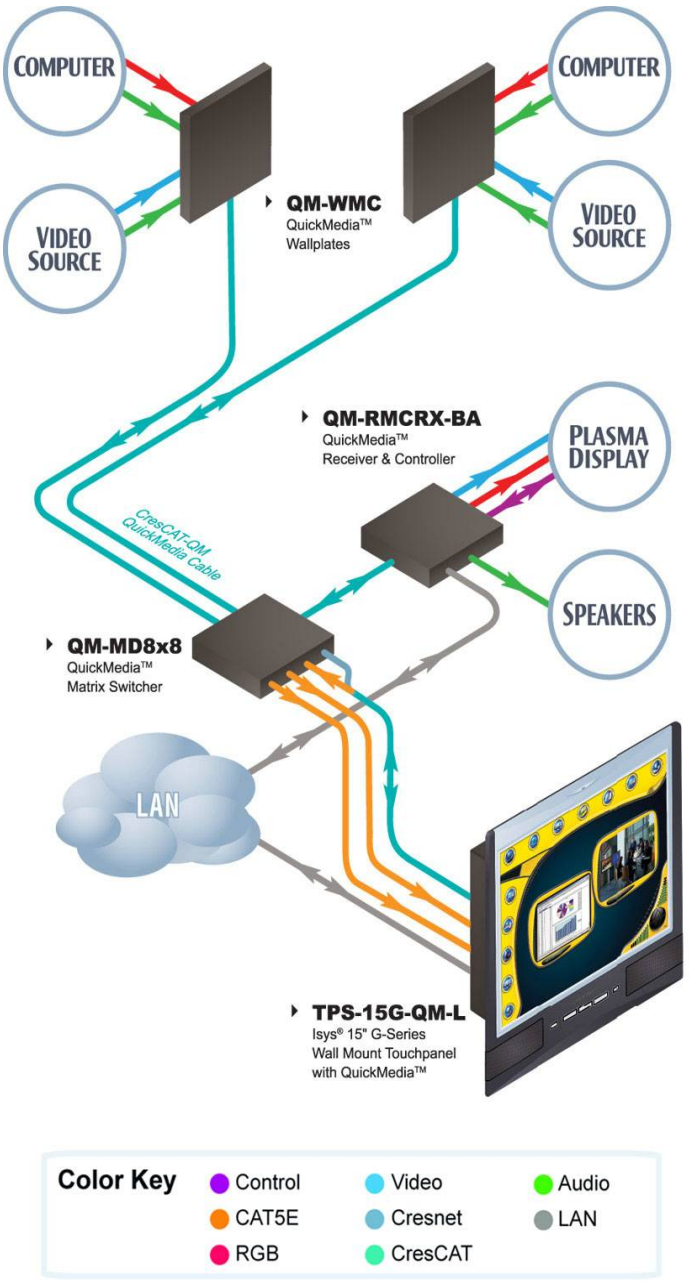
AVAILABLE MODELS

TPS-15G-QM-LB: Isys G-Series 15" Wall Mount Touchpanel, Black
TPS-15G-QM-LW: Isys G-Series 15" Wall Mount Touchpanel, White

AVAILABLE ACCESSORIES

BB-15L : Pre-Construction Wall Mount Back Box
PMK-15L: Pre-Construction Wall Mount Kit
TMK-15L : Trim Ring
MMK-15L : Mud Ring
WMKT-15L : Lectern or Post-Construction Wall Mount Kit with Trim Ring
RMK-15L : Rack Mount Kit
QM-TX : QuickMedia Transmitter
TPS/TPMC-CBL-T : Triamese Interface Cables
ST-PK : Programming Cable Kit
CresCAT®QM : QuickMedia™ Cable
CresCAT®IM : iMedia Cable

TPS-15G-QM-L in a QuickMedia System



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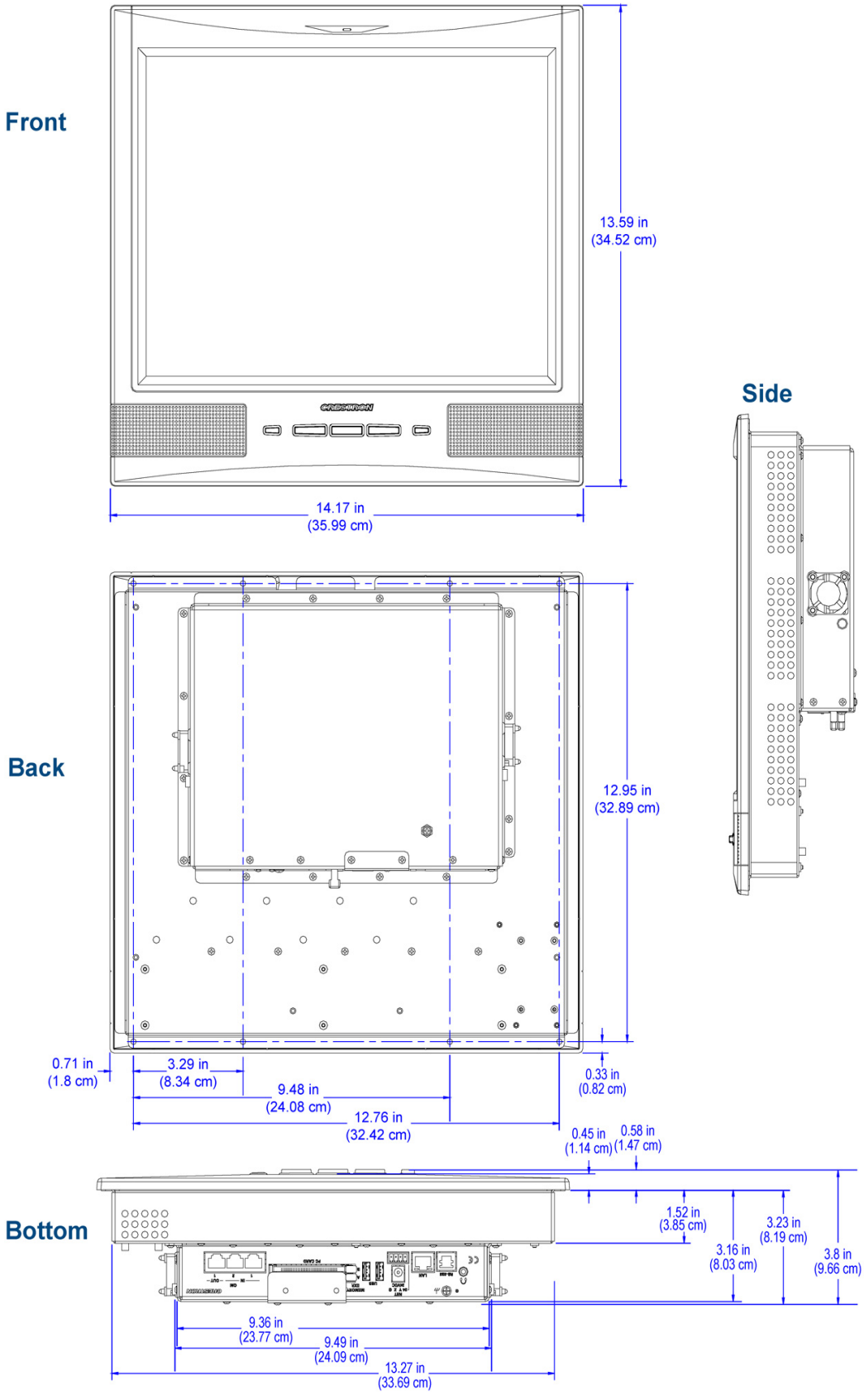

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