

# TruVision TVM-xxx2 LED Monitors A&E Specifications, Division 28 00 00 Electronic Safety and Security

P/N 1073348-EN • REV A • ISS 13DEC17

This A&E Specification conforms to CSI MasterFormat 2016 guidelines.

## 28 01 00 Operation and Maintenance of Electronic Safety and Security

### 28 01 20 Operation and Maintenance of Video Surveillance

#### A. Operations

1. The monitors shall support an on-screen display (OSD) interface using buttons on the monitor's external case to configure monitor functions.
2. The monitors shall support UTC cameras and recorders as well as TruVision Navigator.
3. The monitors shall support PAL & NTSC with the Auto Detect feature.
4. The monitors shall support high resolution 1920 × 1080 @ 60 Hz full HD.
5. The monitors shall support the following image-related features:
  - a. LED backlighting
  - b. Wide viewing angle
  - c. High contrast ratio
  - d. Fast response time
  - e. High brightness
  - f. 3D comb filter and de-interlace

#### B. Installation, usage, and maintenance

1. The monitors shall be easy to install and set up. For most circumstances, setup shall consist of the following: Installation of the stand/mount
  - a. Cable connection
  - b. Power supply connection
  - c. OSD setup
2. The monitors shall support multi-language OSD.
3. The monitors shall support VESA mounts/mounting (location centered on monitor body):
  - a. 100 × 100 mm
4. The monitors shall support high reliability with a high MTBF design.
5. The monitors shall support OSD selectable 4:3 mode with a 16:9 aspect ratio monitor.

# 28 05 00 Common Work Results for Electronic Safety and Security

## 28 05 07 Power Sources for Electronic Safety and Security

### 28 05 07.13 Power Sources for Video Surveillance

- C. The monitor shall be provided with a built-in, full voltage power supply to support global usage. Depending on the product shipping location, the product will include a minimum 6 ft. power cord:
1. US power cord to ship to Americas.
  2. EU and UK power cords to ship to EMEA.
  3. AU power cord to ship to AUS.

## 28 05 45 Systems Integration and Interconnection Requirements

### D. Connections

1. The monitors shall include one each of the following connectors:
  - a. VGA
  - b. HDMI
  - c. BNC input (except TVM-2212)
  - d. BNC output (except TVM-2212)
  - e. Stereo audio in (3.5 mm jack)

### 28 05 45.11 Mechanical

#### E. Mechanical

##### 1. Dimensions:

Model	Without stand	With stand
TVM-2002	473 × 285 × 50 mm (19 × 11 × 2 in.)	473 × 342 × 170 mm (19 × 13 × 7 in.)
TVM-2202	511 × 334 × 99 mm (20 × 13 × 4 in.)	511 × 392 × 203 mm (20 × 15 × 8 in.)
TVM-2212	511 × 334 × 99 mm (20 × 13 × 4 in.)	511 × 392 × 203 mm (20 × 15 × 8 in.)
TVM-2402	561 × 338 × 45 mm (22 × 13 × 2 in.)	561 × 399 × 218 mm (22 × 16 × 9 in.)
TVM-2702	647 × 392 × 49 mm (25 × 15 × 2 in.)	647 × 447 × 249 mm (25 × 18 × 10 in.)
TVM-3202	728 × 433 × 51 mm (29 × 17 × 2 in.)	728 × 535 × 218 mm (29 × 21 × 9 in.)
TVM-4002	907 × 522 × 48 mm (36 × 21 × 2 in.)	907 × 576 × 2218 mm (36 × 23 × 9 in.)

##### 2. Weight:

Model	Without stand	With stand
TVM-2002	2.4 kg (5 lb.)	2.8 kg (6 lb.)
TVM-2202	3.3 kg (7 lb.)	3.9 kg (9 lb.)
TVM-2212	3.3 kg (7 lb.)	3.9 kg (9 lb.)
TVM-2402	3.5 kg (8 lb.)	3.9 kg (9 lb.)
TVM-2702	5.5 kg (12 lb.)	5.9 kg (13 lb.)
TVM-3202	6.4 kg (14 lb.)	9.3 kg (20 lb.)
TVM-4002	8.4 kg (18 lb.)	11.4 kg (25 lb.)

## 28 05 45.13 Electrical

### F. Electrical

1. Input voltage: 100 to 240 VAC.
2. Power consumption:

TVM-2002	< 30 W
TVM-2202	< 30 W
TVM-2212	< 30 W
TVM-2402	< 30 W
TVM-2702	< 40 W
TVM-3202	< 45 W
TVM-4002	< 60 W

## 28 05 45.15 Information

### G. Environmental

1. Operating temperature range 0 to 40°C (32 to 104°F), Relative humidity 10 to 90%.
2. Relative humidity: 10 to 85% (non-condensing).

### H. Compliance

1. FCC
2. CE
3. RCM
4. UL
5. WEEE
6. RoHS
7. REACH

# 28 51 00 Information Management & Presentation

## 28 51 19 Control Room and Monitoring Equipment

### 28 51 19.11 Display/Workstations

#### I. Hardware

1. The monitor shall be capable of displaying on-screen text and menus in more than one language. This shall be user-selectable via the menu system.
2. The monitor shall have robust buttons integrated into the unit, used for menu navigation, setup, and control of the unit, with no need for an external control device.
3. Certain monitors are operable via remote control (TVM-2702 / 3202 / 4002 only).
4. The monitor shall have a robust, illuminated LED integrated into the front panel of the unit.
  - a. Status LEDs
    - i) Power: A steady green light indicates that the monitor is powered on.

#### J. Monitor Features

1. Description:

TVM-2002	TruVision™ LED 20" Class Full HD Monitor, HDMI/VGA/BNC
TVM-2202	TruVision™ LED 22" Class Full HD Monitor, HDMI/VGA/BNC
TVM-2212	TruVision™ LED 22" Class Full HD Monitor, HDMI/VGA

TVM-2402	TruVision™ LED 24" Class Full HD Monitor, HDMI/VGA/BNC
TVM-2702	TruVision™ LED 27" Class Full HD Monitor, HDMI/VGA/BNC
TVM-3202	TruVision™ LED 32" Class Full HD Monitor, HDMI/VGA/BNC
TVM-4002	TruVision™ LED 40" Class Full HD Monitor, HDMI/VGA/BNC

2. System on Chip (SOC): MST V59 (TVM-2212 only: MST 58CDT9)

K. Specifications

1. Video

a. Panel size and type shall be:

TVM-2002	19.53-inch LED backlit
TVM-2202	21.5-inch LED backlit
TVM-2212	21.5-inch LED backlit
TVM-2402	23.6-inch LED backlit
TVM-2702	27-inch LED backlit
TVM-3202	31.5-inch LED backlit
TVM-4002	39.5-inch LED backlit

b. Pixel pitch (mm) shall be:

TVM-2002	0.2265(H) × 0.221(V)
TVM-2202	0.24825(H) × 0.24825(V)
TVM-2212	0.24825(H) × 0.24825(V)
TVM-2402	0.2715(H) × 0.2715(V)
TVM-2702	0.3114(H) × 0.3114(V)
TVM-3202	0.12125(H) × 0.36375(V)
TVM-4002	0.15245(H) × 0.4494(V)

c. Aspect ratio shall be 16:9.

d. Viewing angle (H/V) shall be:

TVM-2002	178°/178°
TVM-2202	170°/160°
TVM-2212	170°/160°
TVM-2402	170°/160°
TVM-2702	170°/160°
TVM-3202	178°/178°
TVM-4002	178°/178°

e. The contrast ratio shall be:

TVM-2002	3000:1
TVM-2202	1000:1
TVM-2212	1000:1
TVM-2402	1000:1
TVM-2702	1000:1
TVM-3202	1000:1
TVM-4002	5000:1

f. The response time shall be:

TVM-2002	20 ms
TVM-2202	5 ms

TVM-2212	5 ms
TVM-2402	5 ms
TVM-2702	5 ms
TVM-3202	8 ms
TVM-4002	9.5 ms

g. Brightness (candela per square meter) shall be:

TVM-2002	250 cd/m <sup>2</sup>
TVM-2202	250 cd/m <sup>2</sup>
TVM-2212	250 cd/m <sup>2</sup>
TVM-2402	250 cd/m <sup>2</sup>
TVM-2702	300 cd/m <sup>2</sup>
TVM-3202	300 cd/m <sup>2</sup>
TVM-4002	360 cd/m <sup>2</sup>

- h. The monitors shall support high resolution 1920 × 1080 @ 60 Hz full HD.
- i. Refresh rate (vertical frequency) shall be 60, 70, 75 Hz depending on resolution.
- j. Color depth shall be 24 bits; 16.7 million colors.
- k. Video compatibility shall be NTSC/PAL auto detect.

2. Audio

a. There shall be one stereo audio input (3.5 mm jack)

b. Audio speaker power shall be:

TVM-2002	1.5 W × 2
TVM-2202	1.5 W × 2
TVM-2212	2 W × 2
TVM-2402	2 W × 2
TVM-2702	2 W × 2
TVM-3202	2 W × 2
TVM-4002	2 W × 2

3. Remote control

a. The monitor shall have an IR-remote that will emulate the front panel keys (TVM-2702 / 3202 / 4002 only).

## Contacting Support

North America:

855-286-8889

[techsupport@interlogix.com](mailto:techsupport@interlogix.com)

Latin America:

561-998-6114

[latam@interlogix.com](mailto:latam@interlogix.com)

Web site:

[www.interlogix.com/customer-support](http://www.interlogix.com/customer-support)

EMEA:

See specific country listings at:

[www.utcssecurityproducts.com/Customersupport](http://www.utcssecurityproducts.com/Customersupport)