VPort 15-M12 Series

EN50155-compliant, 1.3-megapixel, compact fixed dome IP cameras

> Meets EN50155:2007 criteria for rolling stock applications
> Provides MPEG4 and MJPEG dual video streams simultaneously
> Power-over-Ethernet (IEEE 802.3af) supported for less cabling and easy installation
> Hardened M12 Ethernet connectors for high vibration environments
> -25 to 55°C operating temperature
> VPort SDK PLUS provided free

EN50155 CE FC

: Introduction

The VPort 15-M12 is a 1.3 megapixel, compact, fixed-dome type IP camera that features a 1/3.8" Sony Progressive sensor for generating excellent image quality, even in low-light conditions. With an M12 connector and IP66 rain and dust protection, the VPort 15-M12 is well suited for high vibration and outdoor environments such as in trains and buses.

Meets EN50155's Criteria for Rolling Stock Applications

The EN50155 standard is the most basic and most important requirement for electronic devices and equipment used in railway carriages. The VPort 15-M12 meets the majority of the criteria stipulated by EN50155:2007, such as suitability for wide temperature and high vibration and shock environments, and is an optimal solution for railway carriages.

Rugged Design for Mission-critical Industrial Environments

- -25 to 55°C wide operating temperature
- M12 Ethernet connector for high vibration environments
- Power-over-Ethernet (IEEE 802.3af) supported for less cabling and easy installation
- IP66 protection for rain and dust
- Hardened surface installation

High Resolution and High Performance Video Streams

- 1/3.8", 1.3 megapixel progressive CMOS sensor
- Simultaneous MPEG4 and MJPEG video stream (dual streams)
- Supports 1280 x 960 (4VGA, MJPEG), VGA, QVGA, CIF, QCIF resolutions
- Max. frame rates:
  MPEG4: 30 FPS @ VGA, MJPEG: 15 FPS @ 1280 x 960

Auto-configuration Function for Mass Installation and Maintenance

The VPort 15-M12 series supports an auto-configuration function for mass installation and maintenance, which is particularly useful when your system includes large numbers of VPorts. With centralized backups of the configuration files of all VPorts in the system, as well as support for DHCP 66/67 and TFTP, the system integrator or administrator can save a lot of time and effort by installing new VPorts or recovering existing VPorts by downloading the configuration files automatically.

: Specifications

Camera
Sensor: 1/3.8" Sony Progessive CMOS
Picture Elements: 1280 (H) x 960 (V), 1.3 megapixels
Lens: F1.8, focal length = 4.3 mm
Angle of View: 83.1°
Camera Angle: 0-90° (Tilt and Pan)
Illumination: 0.1 Lux @ F1.8
Brightness: Manual control

Synchronization: Internal
Exposure: Auto and manual control modes
Sharpness: Manual control
Contrast: Manual control
White Balance: Auto, indoor, outdoor, manual control modes
Backlight Compensation: On/Off
Rotation: Flip, Mirror, and 180° Rotate
Horizontal Resolution: > 700TVL

Video

Video Compression: MJPEG and MPEG4 (ISO/IEC 14496-2)
Video Outputs: Via Ethernet
Video Streams: Maximum of 2 video streams (1 MPEG4 and 1 MJPEG)
Video Resolution:
• MPEG4: VGA, QVGA, CIF, QCIF
• MJPEG: 1280 x 960 (4VGA), VGA, CIF, QVGA, QCIF
FPS (Frames per second):
• MPEG4: 30 FPS @ VGA
• MJPEG: 15 FPS @ 1280 x 960

Network

Protocols: TCP, UDP, HTTP, Multicast, SMTP, FTP, Telnet, NTP, DNS, DHCP, UPnP, RTP, RTSP, ICMP, QoS, SNMPv1/v2c/v3, DDNS, TFTP, DHCP 66/67
Ethernet: 1 10/100BaseT(X) M12 D-code connector

Power Requirements

Input: Power-over-Ethernet (IEEE 802.3af)

Physical Characteristics

Housing: Plastic, IP66-rated for rain and dust protection
Dimensions: 110 x 47 mm (4.33 x 1.85 in)
Installation: Surface mounting

Security

Password: User level password protection
Filtering: By IP address

Environmental Limits

Operating Temperature: -25 to 55°C (-13 to 131°F)
Storage Temperature: -40 to 85°C (-40 to 185°F)
Ambient Relative Humidity: 5 to 95% (non-condensing)

Regulatory Approvals

EMS:
EN61000-4-2 (ESD), level 2
EN61000-4-3 (RS), level 3
EN61000-4-4 (EFT), level 3
EN61000-4-5 (Surge), level 3
EN61000-4-6 (CS), level 3
EMI: FCC Part 15, CISPR (EN55022) class A
Rolling Stock: EN50155: 2007 compliance (shock, vibration, temperature, and EMC)
Shock: IEC 60068-2-27
Freefall: IEC 60068-2-32
Vibration: IEC 60068-2-6
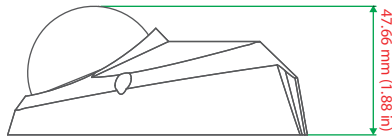Note: Please check Moxa's website for the most up-to-date certification status.

Warranty

Warranty Period: 3 years
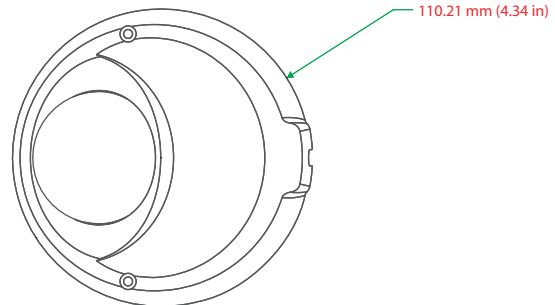**Details:** See www.moxa.com/warranty

Software Bundled Free

VPort SDK PLUS: Includes CGI commands, ActiveX Control, and API library for customized applications or system integration for third-party developers (the latest version of SDK is vailable for download from Moxa's website).

Dimensions

47.66 mm (1.88 in)

110.21 mm (4.34 in)

Side View

Top View

: Ordering Information

Available Models

VPort 15-M12-PAL: EN50155, 1.3 megapixel, compact fixed dome IP camera with M12 Ethernet connector, PAL modulation
VPort 15-M12-NTSC: EN50155, 1.3 megapixel, compact fixed dome IP camera with M12 Ethernet connector, NTSC modulation