



## 1CH H.264 Real-time Network Video Encoder

### Key Features

- Full frame H.264 transmission
- H.264 and JPEG triple encoding: A total of 3 outputs, comprising of 2 H.264 outputs and 1 JPEG output, can be provided.
- Motion adaptive interlace/progressive conversion allows every frame to be clear even when the subject is moving.
- Open command conversion table for RS485 ensures the control of various manufacture's PTZ camera.
- Camera title display: Up to 20 alphanumeric characters embedded in the image
- PoE. The power will be supplied by simply connecting a LAN cable. (IEEE802.3af compliant) 12 V DC power supply\* is also available.
- Small size. And can be installed into the outdoor housing with a camera.
- Alarm sources including VMD, Command alarm, and Video loss
- VMD (Video Motion Detector) with 4 programmable detection areas
- Internet mode: H.264 images can be transmitted by over HTTP protocol.
- Multi-language GUI and setup menu: English, French, Italian, Spanish, German, Russian, Chinese, Japanese

- IPv4/IPv6 protocol supported
- Onvif compliant model

\* For UL listed model(s), only connect 12 V DC Class 2 power supply.

### Standard Accessories

|                           |                        |
|---------------------------|------------------------|
| • Installation Guide..... | 1 pc.                  |
| • CD-ROM*1 .....          | 1 pc.                  |
| • Code label*2.....       | 1 pc.                  |
| • Power cord plug.....    | 1 pc.                  |
| • Cable tie .....         | 2 pcs. (incl. 1 spare) |

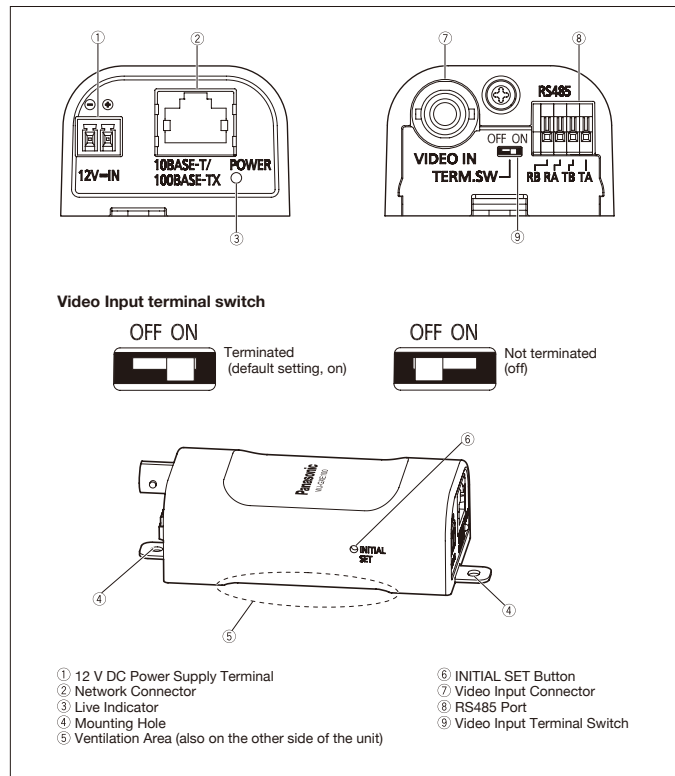
\*1 The CD-ROM contains the operating instructions and different kinds of tool software programs.  
\*2 This label may be required for network management. The network administrator shall retain the code label.

## Specifications

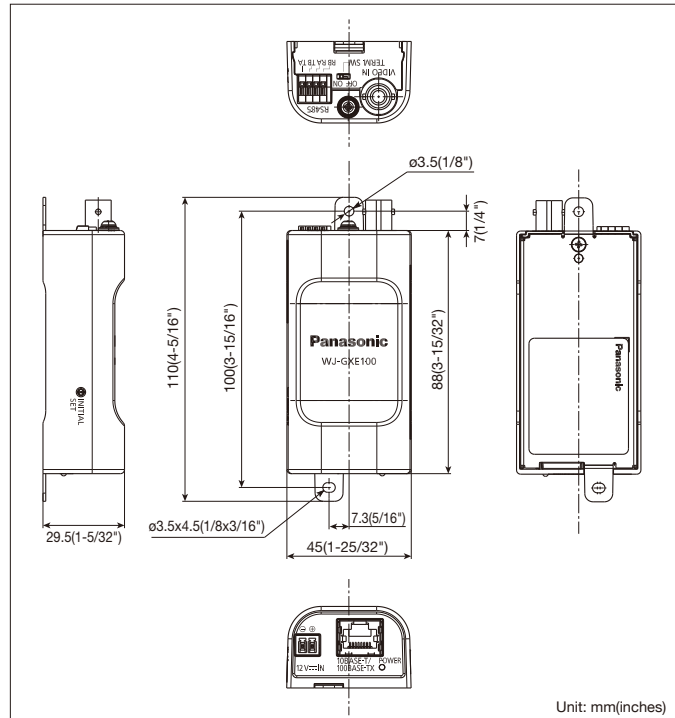
| TV System                    | NTSC   | PAL   |  |   |
|------------------------------|--|---|--|---|
| <b>Video IF</b>              | 1 V [p-p]/75 Ω, NTSC or PAL composite video signal*<br>* NTSC and PAL can be switched in the setup menu. |   |  |   |
| <b>Browser GUI</b>           | Camera Control   | pan / tilt / zoom / focus / preset positions / auto focus / brightness  |  |   |
|                              | Camera Control Protocol  | Panasonic/Pelco-D/Pelco-P/Custom  |  |   |
|                              | Display Mode   | Up to 16 camera images can be displayed simultaneously on a multi-screen. (Including the camera itself)                         |  |   |
|                              | Unit Title   | Up to 20 characters   |  |   |
|                              | Camera Title (OSD)   | Up to 20 characters (alphanumeric characters, marks) On/Off   |  |   |
|                              | Clock Display  | Time: 12H/24H, Date: 5 formats on the browser, Summer time (Auto / Manual)  |  |   |
|                              | Alarm Control  | Reset   |  |   |
|                              | One Shot Capture   | A still picture will be displayed on a newly opened window.   |  |   |
|                              | GUI/Setup Menu Language  | English, French, Italian, Spanish, German, Russian, Chinese, Japanese   |  |   |
|                              | System Log   | Up to 100 (Internal)  |  |   |
| Supported OS <sup>1,2</sup>  | Microsoft® Windows® 7  |   |  |   |
|                              | Microsoft® Windows Vista®<br>Microsoft® Windows® XP Professional SP3                                     |   |  |   |
| Supported Browser            | Windows® Internet Explorer® 9.0 32 bit   |   |  |   |
|                              | Windows® Internet Explorer® 8.0 32 bit   |   |  |   |
|                              | Windows® Internet Explorer® 7.0 32 bit   |   |  |   |
|                              | Internet Explorer® 6.0 SP3   |   |  |   |
| <b>Network</b>               | Network IF   | 10Base-T / 100Base-TX, RJ-45 connector  |  |   |
|                              | Image Resolution   | Picture (Camera mode [4:3])   | H.264: VGA (640x480)/VGA (320x240), max. 25 fps<br>JPEG: VGA (640x480)/VGA (320x240), max. 30 fps    | H.264: VGA (640x480)/VGA (320x240), max. 25 fps<br>JPEG: VGA (640x480)/VGA (320x240), max. 30 fps     |
|                              |  | Picture (Camera mode [16:9])  | H.264: 640x360/320x180, max. 30 fps<br>JPEG: 640x360/320x180, max. 30 fps                            | H.264: 640x360/320x180, max. 25 fps<br>JPEG: 640x360/320x180, max. 25 fps                             |
|                              |  | Picture (Camera mode [D1])  | H.264: D1 (720x480), max. 30 fps<br>JPEG: D1 (720x480), max. 30 fps                                  | H.264: D1 (720x576), max. 25 fps<br>JPEG: D1 (720x576), max. 25 fps                                   |
|                              | H.264 <sup>3</sup>   | Transmission Mode   | Constant bitrate / Framerate priority / Best effort  |   |
|                              |  | Frame Rate  | 1 / 3 / 5 / 7.5 / 10 / 15 / 20 / 30 fps  |   |
|                              |  | Bit Rate/Client   | 64 / 128 / 256 / 384 / 512 / 768 / 1,024 / 1,536 / 2,048 / 3,072 / 4,096 kbps                        |   |
|                              |  | Image Quality   | Low / Normal / Fine  |   |
|                              | Refresh Interval   | 0.2 / 0.25 / 0.33 / 0.5 / 1 / 2 / 3 / 4 / 5 s   |  |   |
|                              | Transmission Type  | Unicast / Multicast   |  |   |
|                              | JPEG   | Image Quality   | 10 steps   |   |
|                              |  | Refresh Interval  | 0.1 fps ~ 30 fps<br>(JPEG frame rate will be restricted when displaying both JPEG and H.264 images.) | 0.08 fps ~ 25 fps<br>(JPEG frame rate will be restricted when displaying both JPEG and H.264 images.) |
|                              | Transmission Type  | Pull / Push   |  |   |
|                              | Total Bit Rate   | 64 / 128 / 256 / 384 / 512 / 768 / 1,024 / 2,048 / 4,096 / 8,192 kbps / Unlimited   |  |   |
|                              | Supported Protocol   | IPv6: TCP/IP, UDP/IP, HTTP, HTTPS, RTP, FTP, SMTP, DNS, NTP, SNMP, DHCPv6, MLD, ICMPv6  |  |   |
|                              |  | IPv4: TCP/IP, UDP/IP, HTTP, HTTPS, RTSP, RTP, RTP/RTCP, FTP, SMTP, DHCP, DNS, DDNS, NTP, SNMP, UPnP, IGMP, ICMP, ARP            |  |   |
|                              | FTP Client   | Alarm image FTP transmission, FTP periodic image transmission <sup>4</sup>  |  |   |
|                              | No. of Simultaneous Users  | Up to 14 users (Depends on network conditions)  |  |   |
|                              | Cellular Phone Compatibility   | JPEG image  |  |   |
|                              | Mobile Terminal Compatibility <sup>5</sup>   | iPad, iPhone, iPod touch (iOS 4.2.1 or later), Android™ mobile terminals  |  |   |
| <b>Alarm</b>                 | Alarm Source   | VMD, Command alarm, Video loss alarm  |  |   |
|                              | Alarm Actions  | E-mail notification<br>Indication on browser, FTP image transfer, Panasonic protocol output                                     |  |   |
| <b>Input/ Output General</b> | RS485 Port   | 1x RS485 (4 wire / 2 wire, Full/Half duplex.<br>Open command conversion table for other manufacturers' PTZ camera)              |  |   |
|                              | Safety/EMC Standard  | UL (UL60950-1), FCC (Part15 ClassA), CE   |  |   |
|                              |  | C-UL (CAN/CSA C22.2 No.60950-1), EN55022 ClassB, EN55024  |  |   |
|                              |  | DOC (ICES003 ClassA)  |  |   |
|                              | Power Source and Power Consumption   | 12 V DC*: 200 mA, PoE 48 V: 75 mA (Class 1 device)<br>* For UL listed model(s), only connect 12 V DC Class 2 power supply.      |  |   |
|                              | Ambient Operating Temperature  | -10 °C ~ +50 °C (14 °F ~ 122 °F)<br>(During start-up: 0 °C to +50 °C (32 °F to 122 °F))   |  |   |
|                              | Ambient Operating Humidity   | Less than 90 % (no condensation)  |  |   |
|                              | Dimensions   | 45 mm (W) x 29.5 mm (H) x 88 mm (D)<br>{1-25/32 inches (W) x 1-5/32 inches (H) x 3-15/32 inches (D)}<br>(excluding projections) |  |   |
|                              | Mass (approx.)   | Approx. 110 g (0.24 lbs)  |  |   |
|                              | Finish   | Unit (resin part): PC resin, sail white<br>Unit (metal part): Electrogalvanized steel sheet, sail white coating                 |  |   |

<sup>1</sup> For further information about PC system requirements and precautions for when using Microsoft® Windows® 7, Microsoft® Windows Vista®, or Windows® Internet Explorer®, click "Manual" - "Open" from the supplied CD-ROM and refer to "Notes on Windows®/Internet Explorer® versions".  
<sup>2</sup> When using IPv6 for communication, use Microsoft® Windows® 7 or Microsoft® Windows Vista®.  
<sup>3</sup> Transmission for 2 streams can be individually set in the same compression method.  
<sup>4</sup> Not available when "D1" is selected for "Picture (Camera) mode".  
<sup>5</sup> For further information about compatible devices, refer to our website (<http://panasonic.net/pss/security/support/info.html>).

## Part Names and Functions



## Appearance



### Trademarks and registered trademarks

- Microsoft, and Windows are registered trademarks of Microsoft Corporation in the U.S. and other countries.
- iPad, iPhone and iPod touch are registered trademarks of Apple Inc.
- Android is a trademark of Google Inc.
- UniPhier is a registered trademark of Panasonic Corporation.
- "i-PRO SmartHD" logos are trademarks or registered trademarks of Panasonic Corporation.
- All other trademarks identified herein are the property of their respective owners.

### Important

- Safety Precaution: Carefully read the operating instructions and installation manual before using this product.
- Panasonic cannot be responsible for the performance of the network and/or other manufacturers' products used on the network.

- Masses and dimensions are approximate.
- Specifications are subject to change without notice.
- These products may be subject to export control regulations.

DISTRIBUTED BY:

# Panasonic

<http://panasonic.net/security/>

<http://www.facebook.com/PanasonicNetworkCamera>

Printed in Japan (2A-104AL)