4K1MOS/2K1MOS Camera Head

**GP-HE43/GP-HE23**

Camera Control Unit

**GP-CE13**

# LUMINALUX Lite

**Camera, recording and network streaming functions.**

# All in one compact package.

## High resolution/high image quality

## 4K 30p / 2K 60p single MOS Small and light weight Camera Head

## All-in-one compact camera control unit

Same size as the previous model (GP-KH232 series), with built-in recording and streaming functions.

4K 30p / 2K 60p HDMI Output

Equipped with up to 6 user profile functions. USB memory can be saved and read as a medium.
By default, recommended values for each endoscope/microscope scene are registered. Can be overwritten.

Recording function to USB memory (up to 4K 30p / 2K 60p H.265/H.264, JPEG recording)

Supports streaming (live distribution, redistribution from USB memory, video storage on server)

## i-PRO Open platform Technology

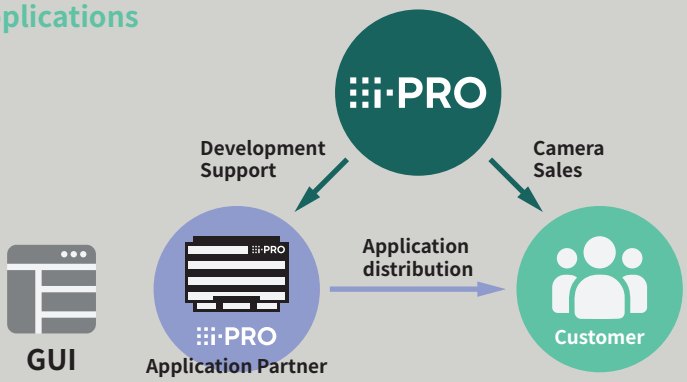
Applications developed by application partners can be added to this Camera Control Unit according to customer needs.
i-PRO Open Platform is a program that allows you to install
and use unique applications developed by application partners on our cameras.

## Solutions combining i-PRO cameras and your applications

### ■ i-PRO Open Platform

Customer can develop and upload their own “CCU control APP”
by using i-PRO SDK environment.

- ■ CCU Control, Setting, Control via serial or Network, Access video & Snapshot and streaming.
- ■ Integrated your own GUI into our CCU
- ■ Edge AI Ready (TBD)



i-PRO

LUMINALUX Lite

**SPECIFICATIONS**

| Camera Head | 4K 1MOS | 2K 1MOS |
|---|---|---|
| | BOX Type | BOX Type |
| Model Number | GP-HE43CX0-0F * | GP-HE23CX0-0F * |
| Image Sensor | 1 / 3 type 4K 1MOS sensor | 1 / 3 type 2K 1MOS sensor |
| Scanning Method | Progressive Scan , Rolling Shutter | Progressive Scan, Rolling Shutter |
| Resolution | 1,800 TV lines Typ. | 900 TV lines Typ. |
| Sensitivity | F8 (2000 lx, 3200 K, Gain 9 dB) | F8 (2000 lx, 3200 K, Gain 9 dB) |
| Frame Rate | 29.97 / 25 fps | 59.94 / 50 fps |
| S / N Ratio | 54 dB (Gain OFF, Head Gain Off) | 54 dB (Gain OFF, Head Gain Off) |
| Camera Head Switch | – | – |
| Lens Mount | C-Mount | C-Mount |
| Operating Temperature ** | Ta: 0 °C to 40 °C (32 °F to 104 °F) | Ta: 0 °C to 40 °C (32 °F to 104 °F) |
| Operating Humidity | 30 % to 90 % (without condensation) | 30 % to 90 % (without condensation) |
| Dimension (W x H x D) | 28 mm x 27 mm x 22.9 mm | 28 mm x 27 mm x 22.9 mm |
| Weight | 48 g | 48 g |

* When the 13th digit is F, IR Cut Filter is bundled. When the 13th digit is N, IR Cut Filter is not bundled. ** Ta: Ambient Temparature, Tc: Device Case Tempatarure

| CCU | | BOX | Board | |
|---|---|---|---|---|
| Model Number | | GP-CE13X00-0B | GP-CE13B00-0A | GP-CE13B00-0B |
| Camera Head to be connected | | GP-HE43CX0-0F, GP-HE23CX0-0F | | |
| Video Output : HDMI | | HDMI ( 4K / Full HD ) | | |
| Video Output Format : HDMI | | 3840 x 2160 p (29.97 Hz / 25 Hz), 1920 x 1080 p (29.97 Hz / 25Hz) *1 / 1920 x 1080 p (59.94 Hz / 50 Hz) *2<br>*1 When GP-HE43C is connected. *2 When GP-HE23C is connected. | | |
| External Control | Foot Switch | ø3.5 mm stereo mini jack (two inputs) | Two inputs | |
| | External Control | ø3.5 mm stereo mini jack (3-poles serial, RS232C signal compliant) | UART (3.3 V) | |
| | Earth Terminal | Yes | – | |
| | USB | USB2.0 (video strage) | USB2.0 (video strage) | |
| Network | | 10BASE-T / 100BASE-TX , RJ45 Connector | 10BASE-T / 100BASE-TX, RJ45 Connector | |
| Protocol | | IPv , IPv4 w / Envryption | IPv6, IPv4 w / o Envryption | |
| Power source and consumption | | 12 V DC : 930 mA (including camera head, USB power supply) | 12 V DC : 930 mA (including camera head, USB power supply) | |
| Power Supply (Option) | | MPU63A-105 | – | |
| Operating Temperature ** | | Ta: 0 °C to 40 °C (32 °F to 104 °F) | Tc: 0 °C to 70 °C (32 °F to 158 °F) | |
| Operating Humidity | | 30 % to 90 % (without condensation) | – | |
| Dimension (W x H x D) | | 120 mm x 36 mm x 157 mm | 104 mm x 11.6(17.7) mm x 139 mm | |
| Weight | | Approx. 680 g (1.5 lbs.) | Approx. 147 g (0.32 lbs.) | |
| Camera Cable | | GP-UC532G02A (2 m), GP-UC532G03A (3 m)<br>GP-UC532G04A (4 m), GP-UC532G06A (6 m) | | |
| CCU Function | Exposure Control | Shutter, Gain, Long Exposure | | |
| | Picture Adjustment | White Balance , Detail Enhancement , DNR , Color leve l, Matrix Color Adjustment | | |
| | Contract Adjustment | Gamma, Knee, Pedestal, Image Enhancement | | |
| | General Functions | User Profile (6 profiles), Profile ID / Label, Color Bar, OSD | | |
| Safety Standard | | UL62368-1, CAN/CSA C22.2 NO.62368-1, IEC62368-1, EN IEC 62368-1, | | |

** Ta: Ambient Temparature, Tc: Device Case Tempatarure

**https://i-pro.com/products_and_solutions/en/imv/products**

**Contact :**
**US** medical.vision@us.i-pro.com **EMEA** imv.sales.eu@i-pro.com **APAC** mvglobalsalesjp@i-pro.com

**Important**

– In case Final Product, which equips the Product(s), is used under insertion in the human body, i-PRO shall not be responsible for Safety.
– Quality and Safety shall be ensured by Buyer of the Product(s), and the Buyer shall be responsible for that usage.
– Masses and dimensions are approximate.

2025-03-006-MV