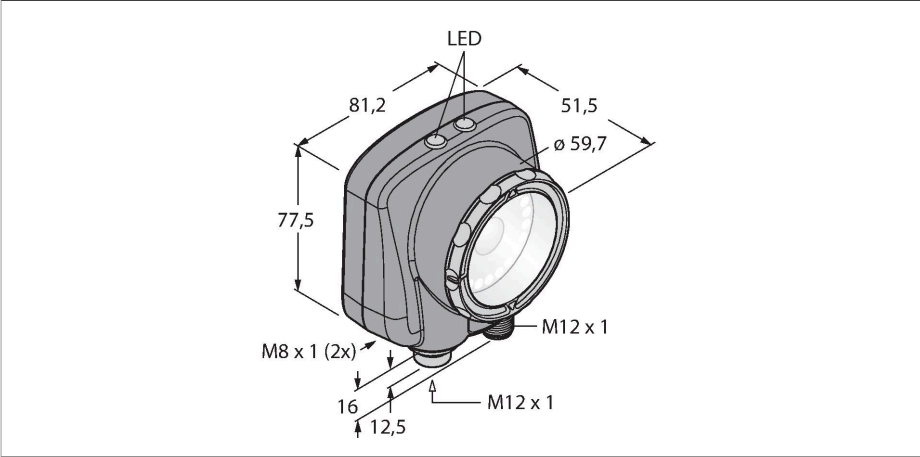


# IVU2PRGG16

## Vision Systems – Grayscale Image Sensor



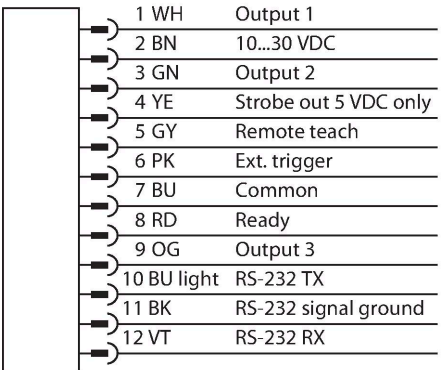
Technical data

|                              |                                                        |
|------------------------------|--------------------------------------------------------|
| Type                         | IVU2PRGG16                                             |
| ID                           | 3090908                                                |
| Camera data                  |                                                        |
| Function                     | Gray value                                             |
| Resolution                   | 752 x 480 Pixels                                       |
| Light type                   | Green                                                  |
| Brennweite                   | 16 mm                                                  |
| Special features             | Wash down                                              |
| Electrical data              |                                                        |
| Operating voltage            | 10...30 VDC                                            |
| DC rated operational current | ≤ 1000 mA                                              |
| Communication protocol       | EtherNet/IP<br>Modbus TCP<br>PCCC<br>PROFINET<br>RS232 |
| Mechanical data              |                                                        |
| Design                       | Rectangular, iVu PLUS                                  |
| Dimensions                   | 51.5 x 81.2 x 95.3 mm                                  |
| Housing material             | Plastic, Thermoplastic material, Black                 |
| Window material              | Acrylic, clear                                         |
| Electrical connection        | Connector, M12 × 1, 12-wire                            |
| Display                      | Remote                                                 |
| Ambient temperature          | 0...+50 °C                                             |
| Protection class             | IP67                                                   |
| Tests/approvals              |                                                        |
| Approvals                    | CE                                                     |

Features

- Second iVu generation
- Internal memory for 30 inspections
- 1/3" CMOS, 752x480 pixels
- Integrated ring light: Green
- Protection class IP67
- External strobe output + 5 VDC
- External trigger input
- Lens, 16 mm, M12x1
- External display RDM35 required
- Operating voltage 10...30 VDC
- M12 × 1 male, 12-pin
- 3 x programmable switching output (PNP/ NPN)
- 1 x RS232 data communication
- Ethernet via M8 x 1 male, 4-pin
- USB 2.0 host: M8 female, 4-pin
- Industrial Ethernet: PROFINET, Ether-Net/IP, Modbus/TCP, PCCC

Wiring diagram



Functional principle

The second generation of the iVu-Plus offers the user advanced features and even more options in the selection of the inspections. The sensor is equipped with the same housing and

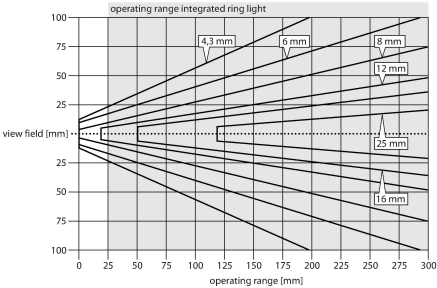
offers the same intuitive user interface and functionality of the previous iVu generation. Sensor with 3 integrated operating modes:

1. Pattern recognition, checks if a pattern on a target is identical to the reference pattern.
2. Blob detection, for identification of one or more object features.
3. Feature detection with positioning, which adapts to the movements.

A blanking function for blob and feature detection is available in the new generation, so that areas in the field of view can be switched blind. Sensor configuration via PC is not required!  
Storage for 30 inspections.

Mounting instructions

Mounting instructions/Description

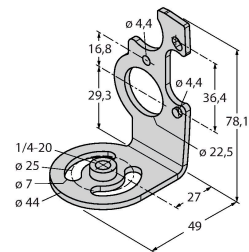


Selecting the focal length  
With known object size or scan field the matching vision sensor is found simply by determining the ratio between the sensing range and the focal length. Use the graphics for selection. Here, the sensing ranges are put in relation to the field view and the lens focal length.

Accessories

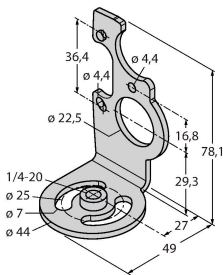
SMBIVURAR 3082547

Brackets for mounting on right side



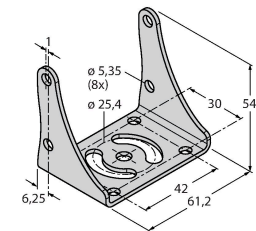
SMBIVURAL 3082546

Brackets for mounting on left side



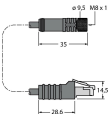
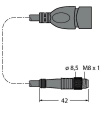
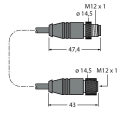
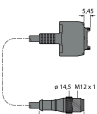
SMBIVUU 3082549

U-bracket for base mounting (incl. SMBIVUB baseplate)

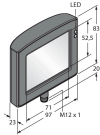
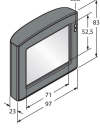


Accessories

| Dimension drawing                                                                   | Type      | ID      |                                                                      |
|-------------------------------------------------------------------------------------|-----------|---------|----------------------------------------------------------------------|
|  | IVUC-1206 | 3014407 | Power supply, M12 × 1 female connector, 12-pin, cable length: 1.83 m |

| Dimension drawing                                                                 | Type           | ID      |                                                                                        |
|-----------------------------------------------------------------------------------|----------------|---------|----------------------------------------------------------------------------------------|
|  | IVUC-E-406     | 3013892 | Ethernet connection cable, M8 × 1 on RJ45, 4-pin, cable length: 2 m                    |
|  | PSG-4M-401-USB | 3011336 | USB adapter cable, M8 × 1 male connector, 4-pin, cable length: 0.3 m                   |
|  | IVURDM-QD-803  | 3028673 | Extension cable for RDM35 remote display, M12 × 1, 8-pin, cable length: 0.91 m         |
|  | IVURD-MX-803   | 3011330 | Extension cable for RD35 remote display, M12 × 1 to Molex, 8-pin, cable length: 0.91 m |

Accessories

| Dimension drawing                                                                   | Type  | ID      |                                                                                                                                       |
|-------------------------------------------------------------------------------------|-------|---------|---------------------------------------------------------------------------------------------------------------------------------------|
|   | RDM35 | 3029512 | Remote display 3.5" touch screen for device installation, connection via M12 plug connector, IVURDM-QD-8.. or IVURDM-QDK-8.. required |
|  | RD35  | 3082646 | Remote display 3.5", touch screen, connection via Molex integral connector, IVURD-MX-8.. or IVURD-MXK-8.. required                    |