

# IL-1000

Amplifier unit, DIN-rail mount type

*Please note that accessories depicted in the image are for illustrative purposes only and may not be included with the product.

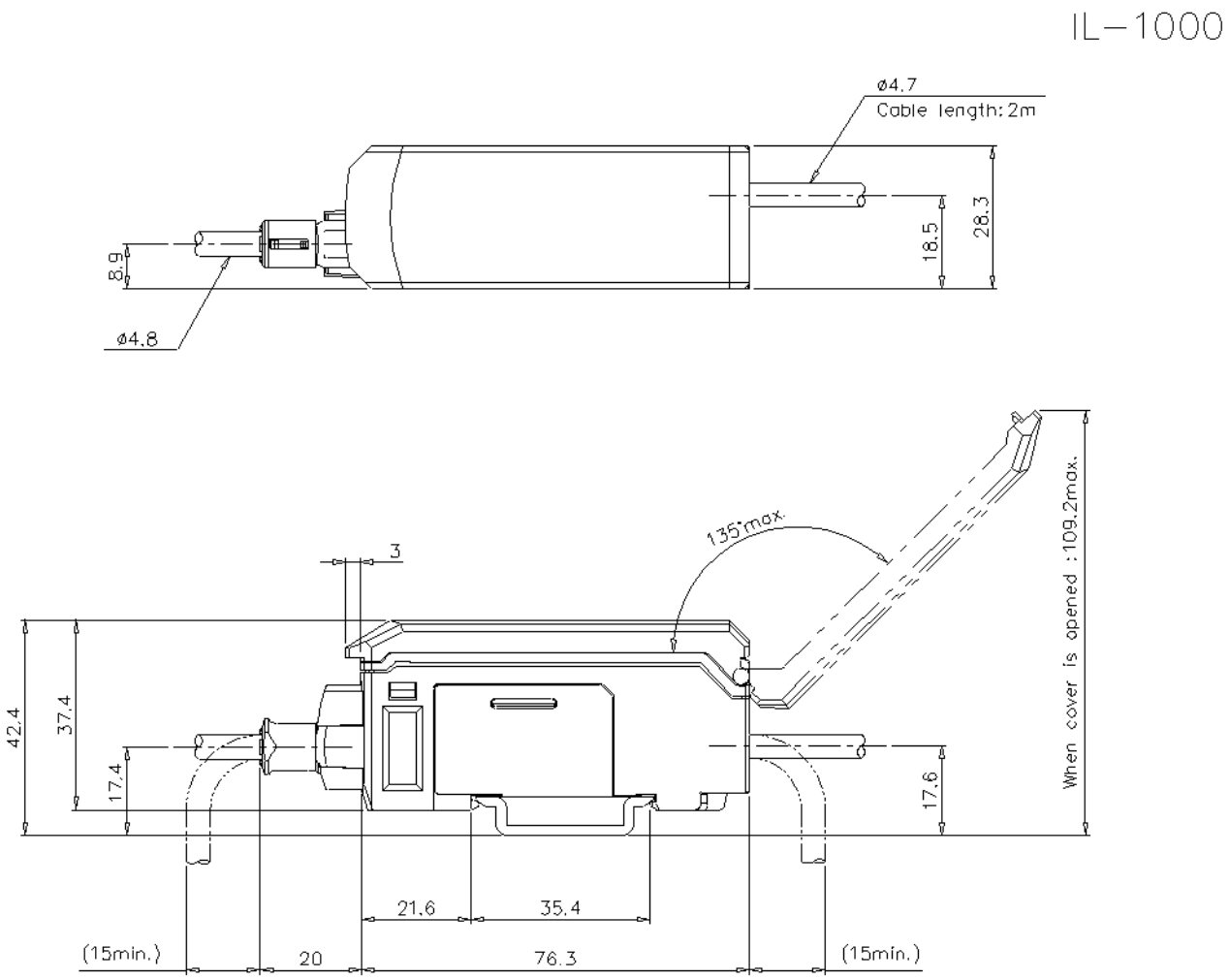
## Specifications

| | | |
|---|---|---|
| Model | | IL-1000 |
| Type | | DIN-rail mount |
| Main unit/Expansion unit | | Main unit |
| Head compatibility | | Compatible |
| Display | Minimum displayable unit | IL-030: 1 µm, IL-065/IL-100: 2 µm, IL-300: 10 µm, IL-600: 50 µm, IL-2000: 100 µm |
| | Display range | IL-030/IL-065/IL-100: ±99.999 mm to ±99 mm (4 levels selectable),<br>IL-300/IL-600: ±999.99 mm to ±999 mm (3 levels selectable),<br>IL-2000: ±9999.9 mm to ±9999 mm (2 levels selectable) |
| | Display rate | Approx. 10 times/sec. |
| Analog voltage output | | ±5 V, 1 to 5 V, 0 to 5 V Output impedance 100 Ω*1 |
| Analog current output | | 4 to 20 mA Maximum load resistance of 350 Ω*1 |
| Control input | Bank switch input | Non-voltage input*2 |
| | Zero-shift input | |
| | Stop emission input | |
| | Timing input | |
| | Reset input | |
| Control output | Judgement output | Open collector output (NPN, PNP changeover possible/N.O., N.C. changeover possible)*3 |
| | Alarm output | Open collector output (NPN, PNP changeover possible/N.C.)*3 |
| Current | Power voltage | 10 to 30 VDC ripple (P-P) 10% included, Class 2*4 |
| | Power consumption | 2300 mW or less (at 30 V: 77 mA or less) |
| Environmental resistance | Pollution degree | 2 |
| | Ambient temperature | -10 to +50 °C 14 to 122 °F (No condensation or freezing) |
| | Relative humidity | 35 to 85 % RH (No condensation) |
| | Vibration resistance | 10 to 55 Hz, Double amplitude 1.5 mm 0.06", 2 hours in each of the X, Y, and Z directions |
| Material | | Case / Front sheet: Polycarbonate; Key tops: Polyacetel; Cable: PVC |
| Weight | | Approx. 150 g (including attachments) |

*1 Select and use one of ±5 V, 1 to 5 V, 0 to 5 V or 4 to 20 mA.
*2 Assign an input of your choice to the 4 external input lines before using.
*3 The NPN open collector rated output is: 50 mA max./ch (20 mA when adding an expansion unit) less than 30 V, residual voltage less than 1 V (less than 1.5 V when adding over 6 units including the main unit)
The PNP open collector rated output is: 50 mA max./ch (20 mA/ch when adding expansion units), less than power voltage, and less than 2 V residual voltage (less than 2.5 V when adding over 6 units including the main unit)
*4 If there are over 6 additional expansion units, please use a power voltage of 20 to 30 V.

# Dimensions

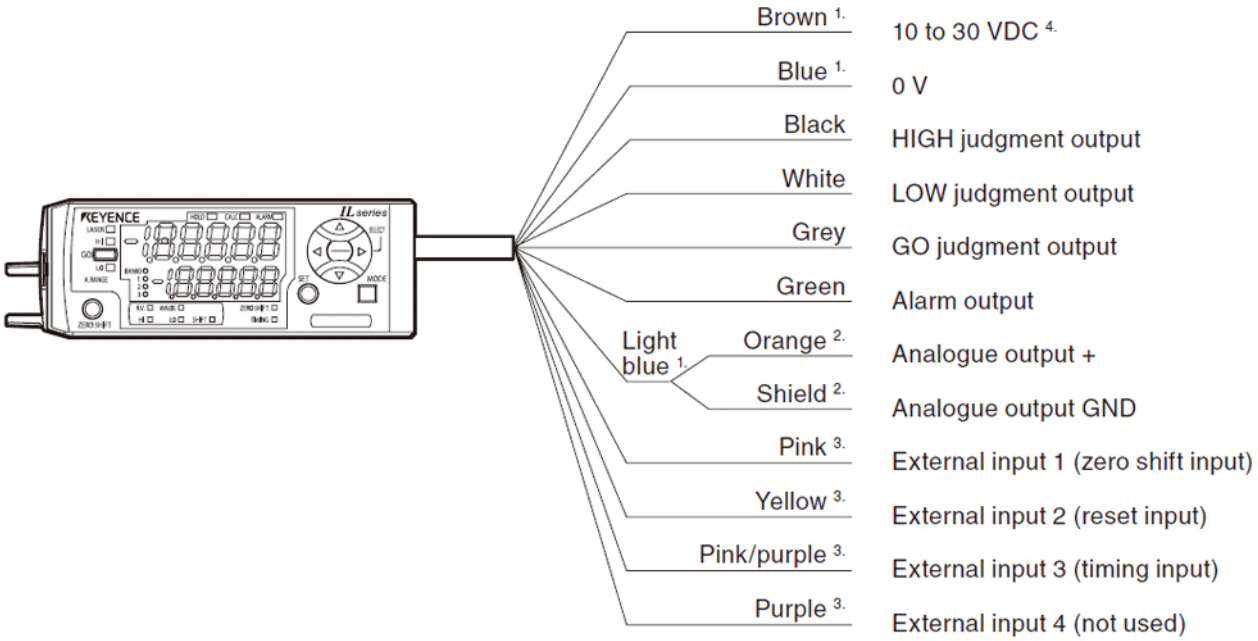
* Download CAD file or product manual for larger image/text and more detail.



# I/O Circuit Connection diagram

* Download CAD file or product manual for larger image/text and more detail.

## Wiring Diagram




1. The brown, blue, and light blue cables are not provided in a IL-1050/IL-1550 unit (expansion unit).
The power is supplied to the expansion unit from the IL-1000/IL-1500 unit (main unit).
2. For an analogue output, OFF (not used), 0 to 5 V, ±5 V,
1 to 5 V, or 4 to 20 mA can be selected.
3. For an external input, bank A input, bank B input, laser emission stop input, or OFF (not used) can also be selected.
For details, refer to the User's Manual.
4. If there are over 6 additional expansion units, please use a power voltage of 20 to 30 V.