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Signal processing unit for photodiode module

C10475

Specifically designed for photodiode modules (C10439 series)

The C10475 is a signal processing unit specifically designed to convert the output of a photodiode module (C10439 series) into digital signals. High-resolution digital output (16 bits) can be obtained through serial connection (RS-232C) to a PC. The sample software that comes with the C10475 allows easily obtaining measurement data using the PC. The measurement data can also be recorded in the internal memory (data logger function).
The C10475 can also operate on batteries for portability.

Features

- **High-resolution digital output (16-bit)**
- **Data logger function**
- **Low battery function**
- **Choice of internal battery (+9 V) or AC adapter (+12 V) operation**
- **Supplies power to the photodiode module**

Applications

- **Precision photometry**
- **Light source power monitors**
- **Fluorescence detection of printed matter**
- **Illuminometers**
- **Color difference meters**
- **Refractometers**
- **Flowmeters, etc.**

Absolute maximum ratings (Ta=25 °C unless otherwise noted)

Parameter	Symbol	Value	Unit
Supply voltage	Vcc max	+14	V
Maximum input voltage	Vin max	±10	V
Operating temperature*1	Topr	0 to +50	°C
Storage temperature*1	Tstg	-10 to +60	°C

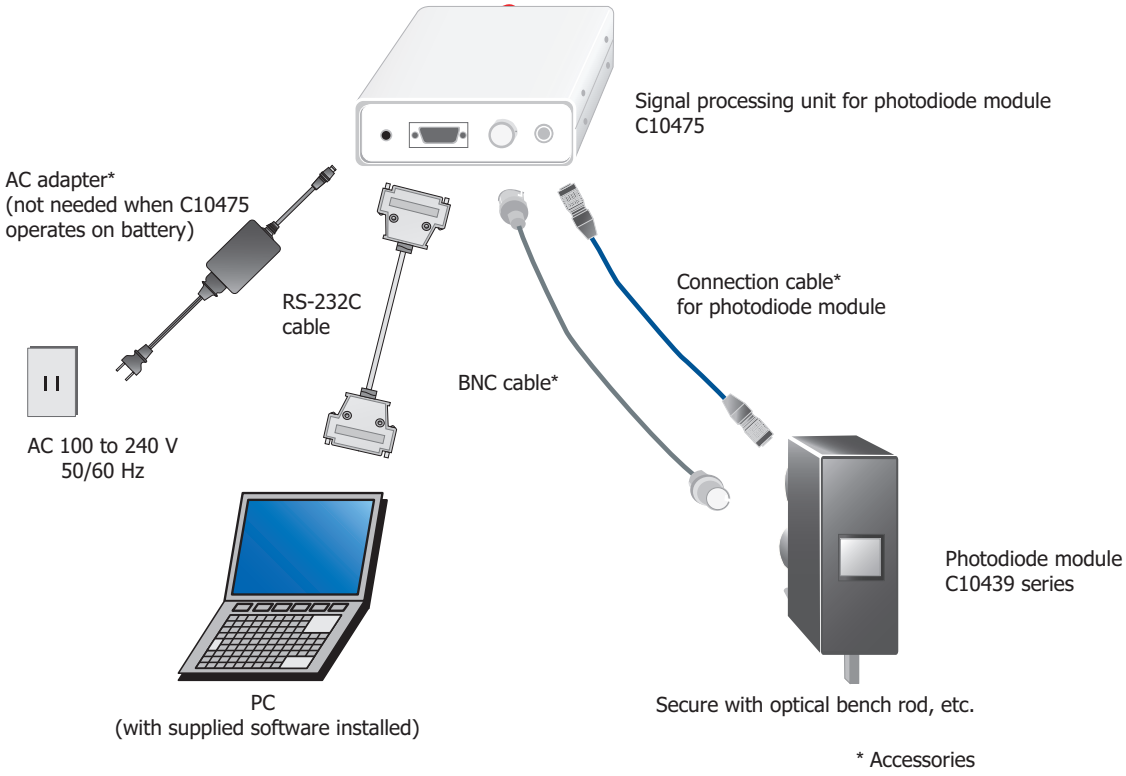
*1: No dew condensation
When there is a temperature difference between a product and the surrounding area in high humidity environment, dew condensation may occur on the product surface. Dew condensation on the product may cause deterioration in characteristics and reliability.
Note: Exceeding the absolute maximum ratings even momentarily may cause a drop in product quality. Always be sure to use the product within the absolute maximum ratings.

Specifications (Vcc=+12 V, Ta=25 °C, unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Supply voltage	Vcc	+6	+12	+14	V
Input voltage	Vin	-5	-	+5	V
Current consumption*2	Icc	-	20	-	mA
Interface	-	RS-232C, 19200 bps, 8-bit, Non-parity, 2-stop bit			-
A/D readout cycle	-	50	-	-	ms

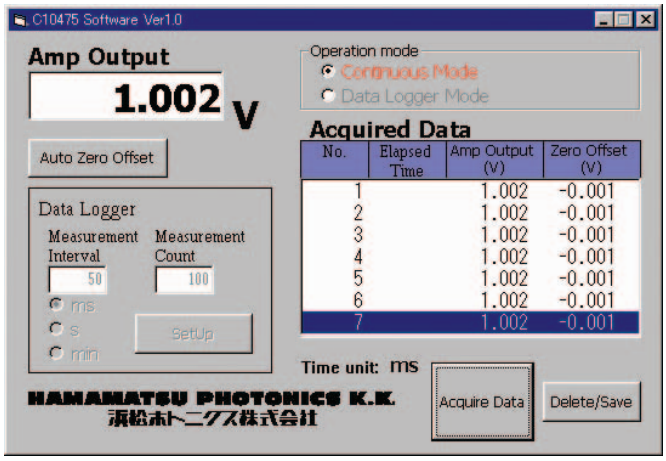
*2: Dark state

Connection example



Sample software (accessory)

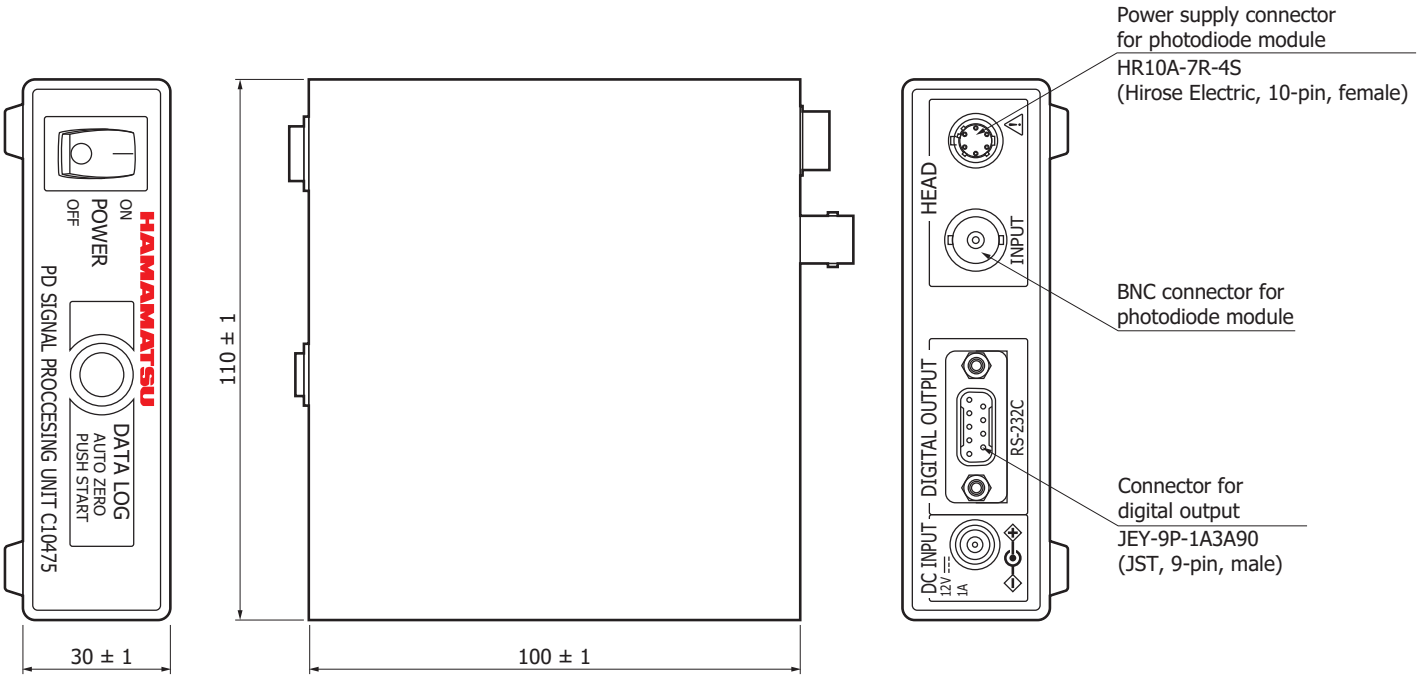
Data logger setting range
Measurement interval: 50 ms to 1 min
(50 ms interval)
Measurement count: 32000 max.
Measurement interval × Meassurement count: 20 hours max.



Compatible OS: Microsoft® Windows® 7 SP1 (32-bit, 64-bit)
Microsoft Windows 8 (32-bit, 64-bit)
Microsoft Windows 10 Professional (32-bit, 64-bit)

Note: Microsoft and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

Dimensional outline (unit: mm)



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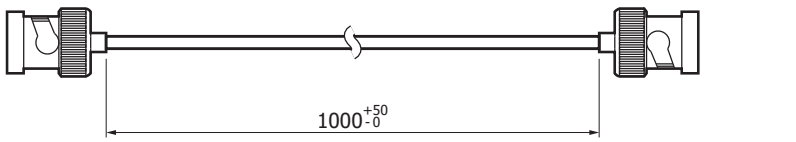
Accessories (unit: mm)

- Instruction manual
- Sample software CD-ROM
- AC adapter
- BNC cable E2573



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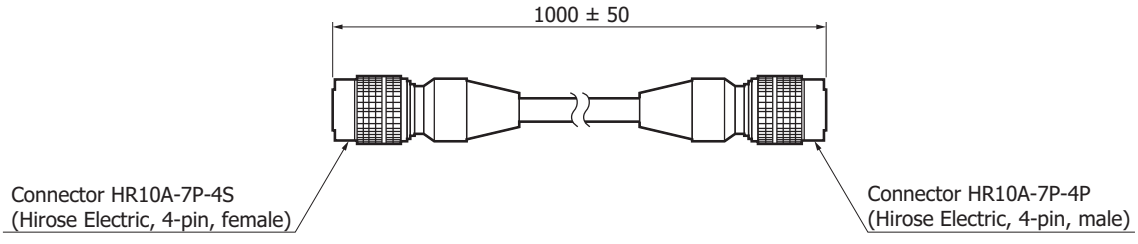
- Cable for photodiode module



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Note: RS-232C cable is not supplied with C10475. For RS-232C cables, use a commercially available cable with 9-pin D-sub connectors (female - female, straight cable).

Related information

www.hamamatsu.com/sp/ssd/doc_en.html

■ Precautions
· Disclaimer

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