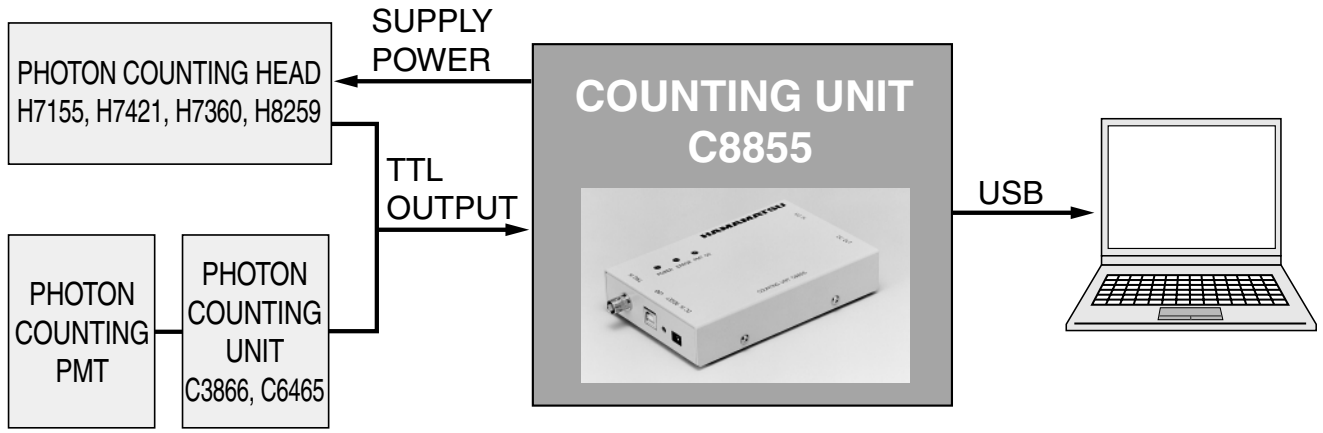
NEW

USB INTERFACE COMPATIBLE COUNTING UNIT

C8855

■Connection Example



OVER VIEW

The C8855 is a counting unit with a USB interface and can be used as a photon counter when combined with a photon counting head, etc.
The counter of the C8855 has two counter circuits (double counter method) capable of counting input signals with no dead time. The USB interface easily connects to a notebook PC allowing measurement in an even wider application field. When used with a photon counting head, the C8855 supplies power (+5 V / 200 mA) necessary to operate the photon counting head. Since the C8855 is hot-swap compatible (plug and play compatible), it helps you set up measurement environment quickly. You can start measurement on the day the C8855 is delivered by using the sample software that supplied with the C8855.
The C8855 cannot be used in simultaneous dual- channel measurements or long-time measurements with a fast time resolution. In such applications, use the M8784 counting board also available from Hamamatsu.

FEATURES

- **Compatible with USB interface (Ver. 1.1)**
- **Compatible with Windows® 98/98SE/2000/Me**
- **Sample software supplied as standard item**
- **Accurate measurement with no dead time (double counter method)**
- **Supplies power to operate photon counting head (power supply capacity: +5 V / 200 mA)**

- **Time-resolved measurement (minimum resolution: 50 μs) for monitoring weak light detection like chemiluminescence or biological clocks**
- **Quick measurement setups (hot-swap compatible)**
  You can start measurement by just connecting the USB cable without restarting the PC, if required software (device driver, etc) is installed into your PC beforehand.
- **Applicable to various measurement methods**
  The C8855 is fully controlled by DLL (dynamic link library) functions that supplied with the C8855.
  User can create own software program, which is adequate for various type of user measurement, based on the DLL functions.

HAMAMATSU

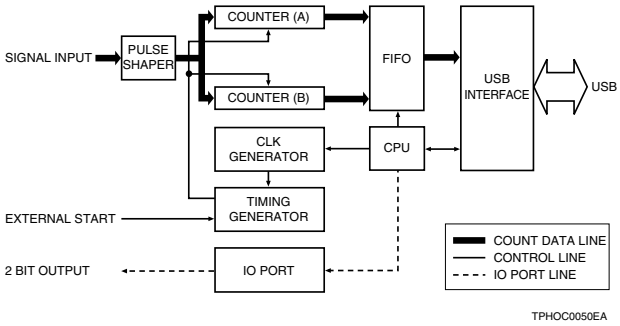
SPECIFICATIONS

Parameter		Description / Value
Input	Number of Input Signals	1 ch
	Signal Input Level	TTL positive logic
	Signal Pulse Width	8 ns or longer
	Input Impedance	50 Ω
Counter	Counter Method	Double counter method
	Max.Count Rate	50 MHz
	Max.Counter Capacity	2^{32} counts/counter gate
Counter Gate	Counter Gate Mode	Internal counter gate only
	Internal Counter Gate Time	50 µs to 10 s (1, 2, 5 step)
Trigger	Trigger Method	Software or external trigger
	External Trigger Signal	TTL negative logic
General Output Section		Open collector / 2 bits
Voltage Output		+5 V / 200 mA Max.
Compatible OS		Windows® 98/98SE/Me/2000
Interface		USB (Ver. 1.1)
Supply Voltage		+5 V / 500 mA Max. (supplied from accessory AC adapter)
Dimensions		(W): 148 mm × (D): 96 mm × (H): 30 mm (excluding rubber feet and projecting parts)
Weight		300 g
Operating Ambient Temperature / Humidity		+5 °C to +45 °C / 80 % or less (no condensation)
Storage Temperature / Humidity		0 °C to +50 °C / 85 % or less (no condensation)
AC Adapter	Input	AC 90 V to AC 260 V
	Output	7 V / 1.6 A

Supplied: CD-ROM (containing instruction manual, device driver, DLL, sample software*, etc.) USB cable, AC adapter, AC cable, power output connector
*: Sample software is configured from Lab VIEW™ of National Instruments, Inc.

CE : Conforms to the EMC directive (89/336/EEC) and the low voltage directive (73/23/EEC) of the European Union.

BLOCK DIAGRAM



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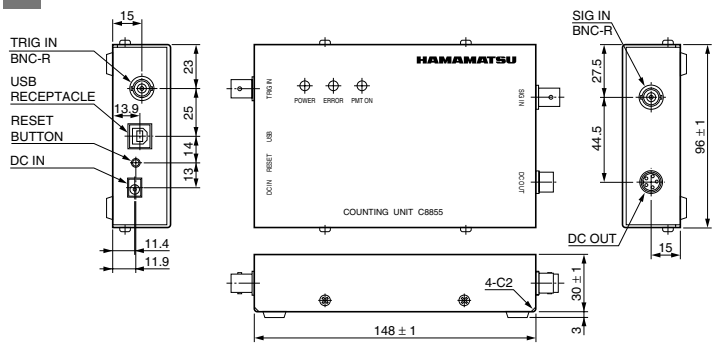
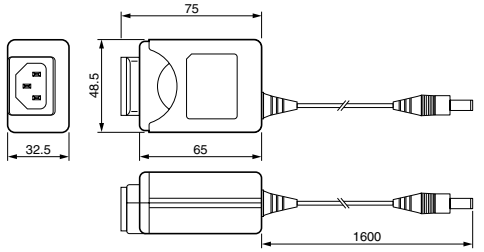
DIMENSIONAL OUTLINES (Unit: mm)



AC adapter (Supplied)



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JAN. 2003 IP