

# sanwa®

## TOKYO JAPAN



DIGITAL MULTIMETER

# PC7000

## True RMS

## Dual Display

### 500000 Count for DCV, Dual Display

- 50000 & 500000 count
- Dual display capability to simultaneously display voltage/current/frequency and AC/DC components of voltage/current
- True RMS (root mean square) method for AC measurement
- Built-in LPF useful for measurement of VFD (variable frequency drive) circuit
- Auto-range-compatible capture function (peak hold)
- Auto-range-compatible max./min./mean value recording function (20 times/sec. sampling rate in voltage and current measurement)
- Temperature measurement function (compatible with Type K thermocouple temperature sensor: -50°C~1000°C)
- Optical link USB interface (optional)
- Conductance measurement
- Dual display with backlight

**Display:** Numeral display 50000 & 500000 selectable,  
Bar graph 41 segments

**Sampling rate:** 5 times/sec. for 50000 count numeral display, 1.25 times/sec.  
for 500000 count numeral display 60 times/sec. for bar graph

**Bandwidth:** V: 45Hz~1kHz, 1kHz~20kHz (below 500V),  
A: 45Hz~1kHz

**Safety:** IEC61010-1 (EN61010-1) 2001-02 CAT.III 600V  
Max./CAT.III 1000V Max.

**Battery life:** Approx. 100h (alkaline battery) at DCV range

| Function                      | Measuring range                                                                                                   | Best accuracy      |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------|--------------------|
| DCV                           | 500m/5/50/500/1000V                                                                                               | $\pm(0.03\% + 2)$  |
| ACV                           | 500m/5/50/500/1000V                                                                                               | $\pm(0.5\% + 40)$  |
| DCA                           | 500μ/5000μ/50m/500m/5/10A                                                                                         | $\pm(0.1\% + 20)$  |
| ACA                           | 500μ/5000μ/50m/500m/5/10A                                                                                         | $\pm(0.6\% + 40)$  |
| Resistance                    | 500/5k/50k/500k/5M/50MΩ/99.99ns <sup>*1</sup>                                                                     | $\pm(0.2\% + 6)$   |
| Capacitance                   | 50n/500n/5μ/50μ/500μ/5m/25mF                                                                                      | $\pm(0.8\% + 3)$   |
| Temperature                   | -50°C~1000°C (-15°F~1832°F)                                                                                       | $\pm(0.3\% + 2)$   |
| Frequency                     | 10Hz~200kHz                                                                                                       | $\pm(0.02\% + 4)$  |
| Logic Hz                      | 5Hz~2MHz                                                                                                          | $\pm(0.002\% + 4)$ |
| Duty cycle                    | 0.1%~99.99%                                                                                                       | $\pm(3d/kHz + 2)$  |
| Continuity                    | Buzzer sounds at between 20Ω and 200Ω.<br>Open voltage : approx. below DC1.3 V                                    |                    |
| Diode test                    | Open voltage : approx. 3 V                                                                                        |                    |
| Fuse                          | 12.5A / 500V Breaking capacity 150kA x 1<br>0.63A / 500V Breaking capacity 20kA x 1                               |                    |
| Size / Weight                 | H184 x W86 x D52mm / 430g (Including holster)                                                                     |                    |
| Standard accessories included | Test lead(TL-23a), Holster with lightproof magnet cap(H-700),<br>K-type thermocouple(K-250PC), Instruction manual |                    |

<sup>\*1</sup> nS(Conductance): High-value resistance of Giga-Ohms for leakage measurements.  
Conductance is the inverse of Resistance, that is  $S=1/\Omega$  or  $nS=1/G\Omega$



Connectable up to 8 channels

## PC Link 7

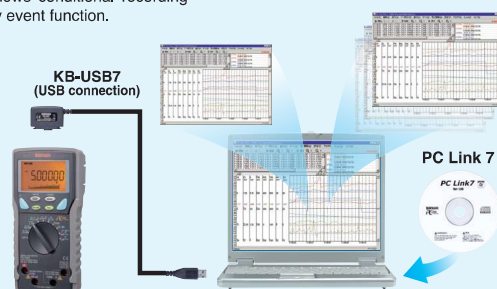


#### Major features:

- Automatically detects a port connected with a digital multimeter
- No additional driver installation required with Windows standard USB drivers
- The retrieval interval can be set by seconds. The shortest reading interval of 0.2 ~ 0.3 seconds depending on the digital multimeter measuring function.
- Allows setting for vertical/horizontal zoom, reading at the cursor position, and Y axis split while retrieving data.
- Allows automatic retrieval by schedule setting.
- Allows data saving into CSV files and sending e-mails of alert information with alarm setting.
- Allows data saving into CSV files with the date and time appended.
- Multi-window, separated graphs by each channel
- Allows automatic e-mail of measurement data.
- Allows limited operations depending on the user with usage restriction function.
- Allows conditional recording by event function.

| Applicable Model                | PC7000, PC700, PC710                                                                                            |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------|
| PC Link 7 operating environment | OS Windows XP/7 32bit<br>CPU Pentium IV 16 GHz or better<br>Memory 1GB or better<br>Resolution 800x600 or above |

<sup>\*</sup>KB-USB7 and PC Link 7 are optional accessories.



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## TOKYO JAPAN

### Dual Display

### 0.06% Maximum Accuracy

- 6000 & 9999 count
- True RMS value measurement (AC) (PC710 only)
- Conforms to IEC61010-01 CAT.III 600V, CATII 1000V standards
- Electric field detection function to detect electric activation/deactivation of conductor using contact/non-contact method (PC710 only)
- Minimum resolution of 0.01mV for ACV and DCV measurement
- High-speed response bar graph
- Dual display capability to simultaneously display voltage/current/frequency and AC/DC components of voltage/current
- Measurement of frequencies (multiple sensitivities selectable), measurement of wide-range condenser capacity
- Auto-range-compatible capture function (peak hold) (PC710 only)
- Auto-range-compatible relative value measurement
- Backlight function (PC710 only)
- Temperature measurement function (PC710 only)
- Optical link USB interface (optional)
- Conductance measurement (PC710 only)

**Display:** Numeral display 9999 & 6000 selectable  
Bar graph 41 segments

**Sampling rate:** 5 times/sec. for numeral display,  
60 times/sec. for bar graph

**Bandwidth:** V: 40Hz~3kHz, 3kHz~20kHz (below 99.99V),  
A: 40Hz~1kHz

**Safety:** IEC61010-1 (EN61010-1) 2001-02 CAT.III 600V  
Max./CAT.III 1000V Max.

**Battery life:** Approx. 60h (manganese battery) at DCV range



**DIGITAL MULTIMETER**  
**PC700**



**DIGITAL MULTIMETER**  
**PC710**



| Function                      | Measuring range                                                                     |                                                                                                                | Best accuracy |
|-------------------------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|---------------|
|                               | PC700                                                                               | PC710                                                                                                          |               |
| DCV                           | 60m/600m/9.999/99.99/999.9V                                                         |                                                                                                                | ±(0.06% + 2)  |
| ACV                           | 60m/600m/9.999/99.99/999.9V                                                         |                                                                                                                | ±(0.5% + 3)   |
| DCA                           | 600μ/6000μ/60m/600m/6/10A                                                           |                                                                                                                | ±(0.2% + 4)   |
| ACA                           | 600μ/6000μ/60m/600m/6/10A                                                           |                                                                                                                | ±(0.6% + 3)   |
| Resistance                    | 600/6k/60k/600k/6M/60MΩ/99.99ns*1                                                   |                                                                                                                | ±(0.1% + 3)   |
| Capacitance                   | 60n/600n/6μ/60μ/600μ/6m/25mF                                                        |                                                                                                                | ±(0.8% + 3)*2 |
| Temperature                   | -50°C~300°C(Measurement possible with PC Link)                                      | -50°C~1000°C(Optional temperature sensor required)                                                             | ±(0.3% + 2°C) |
| Frequency                     | 15Hz~3kHz                                                                           | 15Hz~50kHz                                                                                                     | ±(0.04% + 4)  |
| Logic Hz                      | 5Hz~1MHz                                                                            |                                                                                                                | ±(0.03% + 4)  |
| Duty cycle                    | 0%~100%                                                                             |                                                                                                                | ±(3d/kHz + 2) |
| Continuity                    | Buzzer sounds at between 20Ω and 300Ω. Open voltage : approx. below DC1.2V          |                                                                                                                |               |
| Diode test                    | Open voltage : approx. 3.5V                                                         |                                                                                                                |               |
| Fuse                          | 12.5A / 500V Breaking capacity 150kA x 1<br>0.63A / 500V Breaking capacity 20kA x 1 |                                                                                                                |               |
| Size / Weight                 | H184 x W86 x D52mm / 430g (Including holster)                                       |                                                                                                                |               |
| Standard accessories included | Test lead(TL-23a), Holster with lightproof magnet cap(H-700), Instruction manual    | Test lead(TL-23a), Holster with lightproof magnet cap(H-700), K-type thermocouple(K-250PC), Instruction manual |               |

\*1 nS(Conductance): High-value resistance of Giga-Ohms for leakage measurements. Conductance is the inverse of Resistance, that is S=1/Ω or nS=1/GΩ

\*2 Accuracy of film capacitor or equivalent with low leakage.

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Specifications and external appearance of the product described above may be revised for modification without prior notice.

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