

SEIKO

SYSTEM CLOCKS Catalogue



SEIKO TIME SYSTEMS INC.

MASTER CLOCK (GPS Synchronization)

RACK-MOUNT TYPE



QCG-100



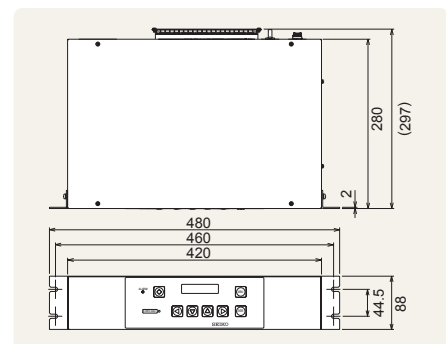
GPS-100

* GPS-100 is available separately.

QCG-100

- QCG-100 is a master clock which is capable of receiving the precise time information from GPS (Global Positioning System) operated by the U.S. and can retain a high-accuracy in the internal clock at all times.
- Exclusive GPS antenna with receiver unit (GPS-100) is available separately to make a time correction for the internal clock in the QCG-100 periodically.
- QCG-100 is capable of making analog secondary clocks activate directly and synchronizing them with a precise time.
- QCG-100 is capable of generating time data (in accordance with RS-422) for digital secondary clocks and other computer systems.

- Automatically time synchronization with GPS (Global Positioning System).
- Time Accuracy when synchronized by GPS signal is within $\pm 5\text{ms}$.
- Exclusive GPS antenna with receiver unit can be purchased separately.
- High-accuracy crystal clock inside (Accuracy daily rate : within $\pm 0.1\text{s}$).
- Rack-mounting type complied with EIA (Electronic Industries Alliance) Standard.
- Maximum 110pcs. of secondary clocks can be activated.
- Both Two hands and Three hands secondary clocks can be activated.
- Serial data signal output (RS-422) is available to synchronize digital clocks and so on.
- Liquid Crystal Display (LCD) with dimmer function for monitor clock in 3 steps (off-mid-hi) on the front panel.
- Daylight saving time and leap time can be set by key input.
- Time adjustable with Time Server (SNTP) through LAN (RJ45) as an optional extension system (QCG-100N).
- Signal auto changer unit QCG-100SC is available as an option for the dual master clock (QCG-100) operation.



CONTENTS			SPECIFICATIONS
MASTER CLOCK	Input / Output Signals	1-sec. polarized signal	Controlled by 2 wires (only clockwise) (Max. 110pcs. of analog secondary clocks can be connected, together with analog secondary clocks of 30-sec. signal.)
		30-sec. polarized signal	Controlled by 2 wires (only clockwise) (Max. 110pcs of analog secondary clocks can be to connected, together with analog secondary clocks of 1-sec. signal.)
		GPS I/F	Data input : Serial data (in accordance with RS-422) 1PPS input : Received by 2 wires Power supply : DC 5V (powered by QCG-100) Sealed : 1 wire * To be connected the exclusive GPS antenna with receiver unit (GPS-100). Available separately. * To be connected with 6 sealed wires cable (as an option).
		Serial data signal output	RS-422 : Time information (Year / Month / Day / Date / Hour / Minute / Second) in SEIKO format shall be sent every second.
		Crystal oscillator frequency	32.768kHz
	Time accuracy	within $\pm 0.1\text{s}$ / day ($0^{\circ}\text{C}\sim+40^{\circ}\text{C}$)	
	Time accuracy when synchronized by GPS signal	within $\pm 5\text{ms}$	
	Frequency of synchronizing with GPS signal	Every 10 min.	
	LCD display	16digits 2 lines with back light	
	Operation unit	8keys	
	How to adjust the time	When powering on : Automatic setting by GPS or manual setting by key input When operating : Periodical and automatically synchronization by GPS signal or manual setting by key input Setting for Time difference : Manual setting by key input *Against UTC, time difference from -12h to +14h can be set by minutes.	
	Daylight saving time	Manual setting by key input	
	Leap second	Manual setting by key input	
	Over current protection	Power input : Non-fuse breaker Internal circuit : Fuse 5A Secondary clock signal output : Non-fuse breaker	
	Alarm detection	If this product detects a decrease in voltage in internal circuit and NFB in secondary clock signal output, the ALARM LED lamp lights up.	
Power supply		AC85~264V, 47~63Hz	
Power consumption		50W	
Operational temperature and humidity range		$0^{\circ}\text{C}\sim+50^{\circ}\text{C}$ / 20~90% with no dew condensation	
Dimensions		QCG-100 : W480×H88×D280mm (excluding protruded portion) GPS-100 : W142×H67×D110mm (with a 1m cable)	
Material		Steel with pearl-gray painted	
Weight		QCG-100 : Approx. 3.5kg GPS-100 : Approx. 420g	

MASTER CLOCK (QUARTZ)

WALL-MOUNT TYPE



QC-55301 / 55302

QC-5500 Series

QC-55101 / 55102 

QC-55201 / 55202 

QC-55301 / 55302 

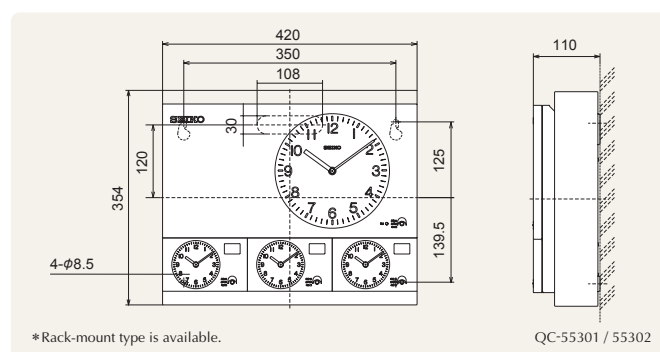
SEIKO QC-5500 Series is a high-precision quartz master clock. By connecting with an external master clock generating 30-sec polarized signal output, time correction can be made. Models operating on AC 110V (QC-55X01) and AC 220V (QC-55X02) are available.

(1) Master clock function (QC-5510X, QC-5520X and QC-5530X)

Up to 30 secondary clocks can be connected to each channel (if the current consumption of each secondary clock is 12mA).

(2) External synchronization function

By connecting with an external master clock generating 30-sec polarized signal output, the loss/gain of the clock is corrected automatically.



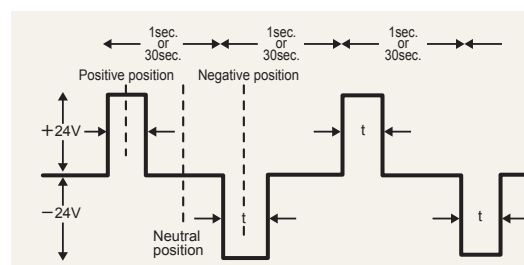
QC-55301 / 55302

CONTENTS		SPECIFICATIONS				
FUNCTIONS	Model No.	QC-55101 / QC-55102		QC-55201 / QC-55202	QC-55301 / QC-55302	
	Number of secondary clock circuits	1 circuit		2 circuit	3 circuit	
MASTER CLOCK	Crystal oscillator frequency		4.194304 MHz			
	Time accuracy		Weekly rate of less than ± 0.7 seconds ($+5^{\circ}\text{C} \sim +35^{\circ}\text{C}$) ; no accumulated error after time correction			
	Time display	Master clock	Year, month, date hour, minute, and seconds; and Digital display in 24-hour indication (not displayed during power failure)			
		Monitor clock	30-second interval hand movement			
	Time setting	Master clock	Setting of year, month, date, hour, minute and seconds			
		Monitor clock	60X speed quick advance of hands by APC system			
	Daylight saving time		Setting of year, month, date and hour for start date, and month, date and hour for end date			
	Secondary clock driver	Driving signal	DC 24V 30-sec. polarized signal ; Pulse width of 0.5-sec. ; No-contact			
		Max. number of secondary clocks to drive	30 units	60 units	90 units	
		Maximum driving capacity	360mA	12mA / unit ; 30 units / circuit	720mA	1,080mA
			360mA / circuit			
		Backup power	DC 24V ; Built-in sealed Ni-Cd rechargeable battery			
		Battery protection	Overdischarge prevention circuit			
		Signal voltage detection	Signal voltage stopper function (stops output when secondary clock driving voltage lowers)			
	External synchronization		DC 24V 30-sec. polarized signal; Every hour except 7, 19, 0, and 12 o'clock; Synchronizable loss/gain range ... Less than 15 seconds			
Synchronization output		RS-422				
Power supply		QC-55X01 : AC 110V $\pm 10\%$ or DC 24V $\pm 10\%$		QC-55X02 : AC 220V $\pm 10\%$ or DC 24V $\pm 10\%$		
Power consumption		21W	32W	42W		
Power failure backup	Master clock	Approx. 5 years (no indication on digital display, counting by internal clock only)				
	Secondary clock driver	30 hours (in case of power failure of more than 30 hours, hands are adjusted automatically after recovery.)				
Operational temperature range and humidity range		$-10^{\circ}\text{C} \sim +50^{\circ}\text{C}$ / 20~80% with no dew condensation				
Dimensions		W420×H354×D110mm				
Material		Front panel : ABS and stainless steel, pearl gray with a slight gloss Rear panel: Stainless steel, pearl gray with a slight gloss				
Weight		Approx. 7.0kg	Approx. 7.2kg	Approx. 7.5kg		
Accessories		Plastic foot, 4 pcs; Miniature fuse; Instruction manual; Mounting hole drilling template; and Insulated crimp terminal				
Options		Rack-mounting fittings (in accordance with EIA Standard)				

How to Drive Secondary Clocks

Accuracy and Synchronization of Secondary Clocks

The role of the secondary clock in a time-keeping system is to accurately reproduce the time signal supplied by the master clock. The master clock and secondary clocks are connected electrically, and the Crystal oscillator frequency of 32.768kHz or 4.194304 MHz/sec. from the master clock is reduced in several stages by the frequency dividing LSI and finally transmitted to the secondary clock as a 1-sec. or a 30-sec. polarized signal of $\pm 24\text{V}$ DC. The secondary clock converts this electrical signal into mechanical energy and, with the same precision as the master clock, simultaneously displays the correct time.



INDOOR SECONDARY CLOCK(24V)

WALL TYPE / RECESSED TYPE

Current consumption of a wall type and a recessed type secondary clock is 12mA.
Input signal of a wall type and a recessed type secondary clock is 30-sec. polarized signal / DC 24V. (*F-001 is 1-sec. polarized signal / DC 24V.)

260-mm Diameter Round Type



SC-200C (F001)
Dial — Steel, White
Hour marker — Black
Hands — Aluminum, Black
Frame — Steel, Cream
Thickness — 40mm
Weight — 1.0kg



SC-201 (F001)
Dial — Aluminum, Silver
Hour marker — Black
Hands — Aluminum, Black
Frame — Steel, Semi-mat black
Thickness — 40mm
Weight — 1.0kg



SC-304 (F001)
Dial — Brass,
 White hairline finish
Hour marker — Brass, Black
Hands — Aluminum, Black
Outer Frame — Polished chromium finish
Thickness — 46mm
Weight — 2.0kg

310-mm Diameter Round Type



SC-300 (F001)
SC-300C (F001)
 (cream color) is also available.
Dial — Steel, White
Hour marker — Black
Hands — Aluminum, Black
Frame — Steel, Gray
Thickness — 40mm
Weight — 1.5kg



SC-301C (F001)
SC-301 (F001)
 (gray color) is also available.
Dial — Steel, White
Hour marker — Black
Hands — Aluminum, Black
Frame — Steel, Cream
Thickness — 40mm
Weight — 1.5kg



SC-302 (F001)
Dial — Steel, White
Hour marker — Black
Hands — Aluminum, Black
Frame — Steel cream
Thickness — 40mm
Weight — 1.5kg



SC-305 (F001)
Dial — Aluminum, Silver
Hour marker — Black
Hands — Aluminum, Black
Frame — Steel, Semi-mat, Black
Thickness — 40mm
Weight — 1.5kg



SC-306 (F001)
Dial — Steel, White
Hour marker — Black
Hands — Aluminum, Black
Frame — Steel, Cream
Thickness — 40mm
Weight — 1.5kg



SC-316 (F001)
SC-316C (F001)
 (cream color) is also available.
Dial — Steel, White
Hour marker — Black
Hands — Aluminum, Black
Frame — Steel, White
Thickness — 40mm
Weight — 1.5kg

410-mm Diameter Round Type



SC-400 (F001)
SC-400C (F001)
 (cream color) is also available.
Dial — Steel, White
Hour marker — Black
Hands — Aluminum, Black
Frame — Steel, Gray
Thickness — 55mm
Weight — 2.5kg



SC-419 (F001)
Dial — Steel, White
Hour marker — Black
Hands — Aluminum, Black
Frame — Steel, White
Thickness — 55mm
Weight — 2.5kg

310-mm Diameter Round Type with second hand (1-sec. polarized signal)



F-001
Dial — Steel, White
Hour marker — Black
Hands — Aluminum, Black
Frame — Steel, White
Thickness — 40mm
Weight — 1.5kg
 *F-001 is driven entirely
 by Master Clock QCG-100.

Square Type with Standard Frame



SC-320 (F001)
SC-320C (F001)
 (cream color) is also available.
Dimensions — W310×H310×D45mm
Dial — Steel, White
Hour marker — Black
Hands — Aluminum, Black
Frame — Steel, Gray
Weight — 2.0kg



SC-323K (F001)
Dimensions — W310×H310×D75mm
Dial — Cloth covered, Black
Hour marker — Brass, White hair-line finish
Hands — Brass, White hair-line finish
Frame — Steel, Cream
Speaker — Max. input 4W
 With output transformer
 Input impedance : 7kΩ
 Output impedance : 8kΩ
Weight — 2.0kg



SC-324 (F001)
Dimensions — W310×H310×D45mm
Dial — Aluminum, Silver
Hour marker — Black
Hands — Aluminum, Black
Frame — Steel, Semi-mat black
Weight — 2.0kg



SC-420C (F001)
Dimensions — W400×H310×D55mm
Dial — Steel, White
Hour marker — Black
Hands — Aluminum, Black
Frame — Steel, Cream
Weight — 2.5kg



SC-422K (F001)
Dimensions — W420×H310×D75mm
Dial — Steel, White
Hour marker — Black
Hands — Aluminum, Black
Frame — Steel, Cream
Speaker section — Cloth covered, Black
Speaker — Max. input 4W
 With output transformer
 Input impedance : 7kΩ
 Output impedance : 8kΩ
Weight — 3.0kg

Square Type with Wood Finish



SC-322S
SC-421
Dial — Wood, Walnut finish
Hour marker — Brass,
 Silver metallic painted
Hands — Brass,
 Silver metallic painted
 *SC-322S : W300×H210×D45mm (1.0kg)
 *SC-421 : W420×H295×D45mm (1.5kg)

Recessed Type



Sharp, straight-bar type hour marker
SC-340S (F001)
SC-440S (F001)
Movement cover — Brass, White hairline finish
Hour marker — Brass, White hairline finish
Hands — Brass, White hairline finish
 *SC-340S : 300mm diameter (0.5kg)
 *SC-440S : 400mm diameter (0.6kg)



Straight-bar type, with numerals
 for the quarter-hours
SC-341S (F001)
Movement cover — Brass, White hairline finish
Hour marker — Brass, White hairline finish
Hands — Brass, White hairline finish
 *SC-341S : 300mm diameter (0.5kg)



Circular type hour marker
SC-342
SC-441 (F001)
Movement cover — Brass, White hairline finish
Hour marker — Brass, White hairline finish
Hands — Brass, White hairline finish
 *SC-342 : 300mm diameter (0.5kg)
 *SC-441 : 400mm diameter (1.0kg)

DOUBLE-FACED TYPE

Current consumption of a double-faced secondary clock is 24mA.
Input signal of a double-faced secondary clock is 30-sec. polarized signal/DC 24V.

Double-faced Suspended Type



SC-360 RoHS

Dimensions — 312mm Dia X
D150mm
Dial — Steel, White
Hour marker — Black
Hands — Aluminum, Black
Frame — Steel, Gray
Pipe — 34mm Dia X
D360mm
Weight — 8.0kg



SC-460 RoHS

Dimensions — W400×H310×
D180mm
Dial — Steel, White
Hour marker — Black
Hands — Aluminum, Black
Frame — Steel, Gray
Flange — W250×H50×
D100mm
Weight — 8.0kg

Double-faced Bracket Type



SC-461 RoHS

Dimensions — W400×H310×
D180mm
Dial — Steel, White
Hour marker — Black
Hands — Aluminum, Black
Frame — Steel, Gray
Flange — W50×H250×
D100mm
Weight — 8.0kg

Double-faced Suspended Type (Condensed Resin Illumination)



Yellow(Y)



Light orange (L)



Green(G)



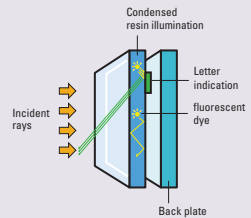
Orange (O)

RWS-6WHB (Y·L·G·O) RoHS RWS-5WHB (Y·L·G·O) RoHS RWS-4WHB (Y·L·G·O) RoHS

- Fluorescent ramps and power are unnecessary for illumination.
- Easy to maintenance.
- To be suitable for station use.

Dimensions — 6WHB : W650×H580×D205mm
5WHB : W510×H450×D178mm
4WHB : W400×H360×D173mm
Dial — Condensed resin illumination
Hands — Yellow (Y), Light orange (L) : Aluminum, Mat-black
Green (G), Orange (O) : Condensed resin
Frame — Steel, Gray-brown painted
Weight — 6WHB : Approx. 22kg (excluding a suspended pipe)
5WHB : Approx. 16kg (excluding a suspended pipe)
4WHB : Approx. 12kg (excluding a suspended pipe)

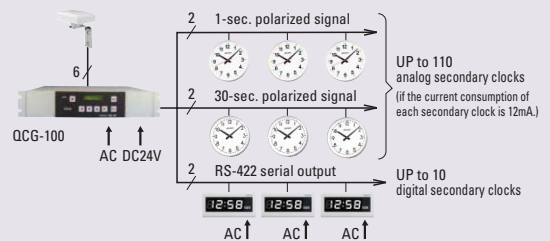
The mechanism of Condensed resin illumination



INFORMATION

		Distance (m) ~ Master Clock to Secondary Clocks ~									
		100	200	300	400	500	600	700	800	900	1,000
Number of Secondary Clocks / Circuits	~5										
	~10			φ1.2 (mm)							
	~15				φ1.6 (mm)						
	~20					φ2.0 (mm)					
	~25						φ2.6 (mm)				
	~30							φ3.2 (mm)			

System configuration



Option Equipment for Secondary Clocks

APX-1011/1021 RoHS Clock controller

Cristal oscillator frequency — 4.194304 MHz
Time accuracy — Weekly rate
of less than ±0.7 second
(+5°C~+35°C)
Input power supply — APX-1011 : AC100-120V
APX-1021 : AC200-240V
Power consumption — 2W (MAX)
Output signal — DC 24V 30-sec.
polarized signal × 2 circuits
Power failure backup — 30 hours
Dimensions — W108.5×H170×D79 mm
Weight — Approx. 760g



APX-1011/1021

MT-01 Secondary clock monitor for APX-1011/1021

Dimensions — W90×H90×D67mm
Weight — Approx. 500g



MT-01

FA-1021 Secondary clock repeater

FA-1021 amplifies the 30-sec. polarized signal transmitted by the master clock.

Input signal — DC 24V 30-sec. polarized signal / AC100-240V
Output signal — DC 24V 30-sec. polarized signal
Number of secondary clock to drive — 30 units
Power failure backup — 30 hours
Dimensions — W200×H310×D96mm
Material — Steel with pearl-gray painted
Weight — Approx. 3.7kg



FA-1021

FA-300 Hand Adjuster with jack plug

Among secondary clocks driven by a master clock, the FA-300 is used for adjusting the hands of a large-sized secondary clock mounted on a wall in a very high position. By the signal from the FA-300, the clock is adjusted apart from a signal from a master clock.

Built-in battery — 006P (9V×3=27V)
Operating time — Approx. 100 minutes
(2,000 Ω load)
Hand moving speed — Approx. 30 times
Output terminal — Jack plug type
Dimensions — W83×H140×D56mm
Material — Steel, Gray
Weight — Approx. 650g



FA-300

FA-301 Jack-plug plate for single-faced clocks



FA-301

FA-302 Jack-plug plate for double-faced clocks



FA-302

QUARTZ BELL TIMER



An intelligent timer for offices, schools, factories, and other locations.

Melody time signals are programmable for up to one week.

CONTENTS	SPECIFICATIONS
Power supply	AC 90V-120V, AC 200V-240V, 50/60Hz
Power consumption	Approx. 4.0W
Power failure backup	Clock : 24 hours, program : 10 weeks
Operating temperature range	-10°C ~ +50°C
Time accuracy	Within ±3 sec./month (+5°C ~ +35°C)
Signal output	2 independent channels (dry contact signal)
Contact out put capacity	AC 125V / 5A , AC 250V / 3A, DC 30V / 5A
Program setting range	In 1-minute increment
Dimensions	W270×H372×D58.5mm
Weight	Approx. 2.0kg (main body)

QBT-30

Announces the start of work, lunchtime, and the end of work with beautiful melodies.

Refined design and outstanding function make this a necessity for every office.

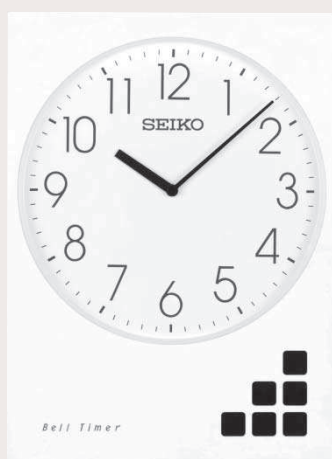
- Up to 60 programs can be set a week at a time.
- Different settings for each day of the week are OK.
Resetting for different times each day is simple and convenient.
- The 10 melodies can be combined as preferred.
- External output can be used to manage lighting, air-conditioning, and so on.

- Westminster Chime (40 Sec.)
- Edelweiss (42 Sec.)
- Melody Fair (43 Sec.)
- Chim Chim Cheree (40 Sec.)
- Bibbidi-Bobbidi-Boo (30 Sec.)
- Yuyake Koyake (40 Sec.)
- Going Home (45 Sec.)
- Etude Op. 10, No. 3 (45 Sec.)
- Beauty and the Beast (44 Sec.)
- A Whole New World (41 Sec.)

*Each title is played twice.

For example, a setting like this is easy to do!

Manage time at school or in the office or the way you've always wanted to!



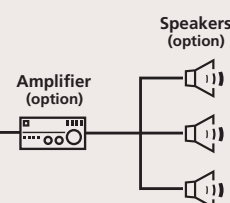
〈For controlling external equipment〉

10:00	Turn on show window lights
20:00	Turn off show window lights

08:00	Turn on air-conditioning
19:00	Turn off air-conditioning

〈For using preset melodies〉

09:00	Work starts—"Westminster Chime"
12:00	Lunchtime—"Edelweiss"
13:00	Lunch ends—"Melody Fair"
17:00	Workday ends—"Westminster Chime"



DIGITAL CLOCK

INDEPENDENT CLOCK

For indoor / outdoor rain proof Type



RBC-200N

Wall type



RBC-302N

Suspended type (Double-faced)



RBC-303N

Bracket type (Double-faced)

CONTENTS		SPECIFICATIONS	
Model No.		RBC-200N (Wall type)	RBC-302N, 303N (Double-faced type)
Digit height		200mm (Orange)	200mm (Yellow)
Dimensions		W950×H380×D184mm	W950×H380×D300mm
Weight		30kg	65kg
Accuracy		Within ±0.2 sec./day at normal temperature	
Operational temperature range		-20°C~+60°C	
Input power		AC (50/60Hz) Time synchronization with the master clock is possible.	
Current consumption		Approx. 1.6A (Including 0.7A for internal illumination)	Approx. 1.9A (Including 0.7A for internal illumination)
Internal illumination		FL-32W×1 (With automatic flasher)	
Display		Magnetic inversion system Changeover between 12- and 24-hour indications	
Power failure backup		Approx. 10hours	
Case		Steel, Metallic brown Front : Transparent glass (Thickness : 3mm)	

*Please turn off the illuminating light while the clock is shone directly by the sun in the daytime.

For Indoor Type



SLC-100W 

Wall type



SLC-120E 

Wall type



SLC-102W 

Suspended type (Double-faced)



SLC-122E 

Suspended type (Double-faced)

CONTENTS		SPECIFICATIONS	
Model No.		SLC-100W (Wall type) SLC-102W (Double-faced type)	SLC-120E (Wall type) SLC-122E (Double-faced type)
Digit height		100mm (White)	120mm (Orange)
Dimensions	Wall type	W620×H170×D60mm	W670×H200×D60mm
	Double-faced	W626×H176×D170mm	W676×H200×D170mm
Weight	Wall type	3.5kg	3.8kg
	Double-faced	12.5kg	13.5kg
Accuracy		Within ±0.2 sec./day at normal temperature	
Operational temperature range		-10°C~+50°C	
Input power		AC (50/60Hz) Time Synchronization with the master clock is possible.	
Current consumption	Wall type	Approx. 0.1A	Approx. 0.2A
	Double-faced	Approx. 0.2A	Approx. 0.4A
Display		White / Orange LED Changeover between 12- and 24-hour indications	
Case		Plastic, Yellowish white	

*A hand adjuster is optional.

WEEKLY DIGITAL CLOCK



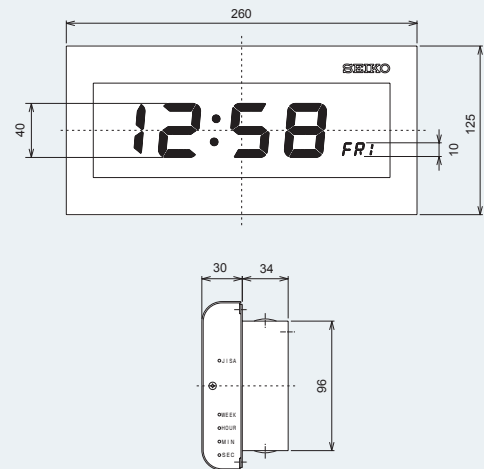
WDC-402

Display

In addition to its single usage, this weekly digital clock is uniquely designed in such a way that it can form an original world time clock by applying multiple units. No need for a master clock since it is a twin synchronous system. (A power box is required when multiple clocks are used to form a world time clock.)

The installation can be either wall type or recessed type. And a map panel of your design can be prepared on request.

Mounting Structure



OUTDOOR CLOCK

LARGE-SIZED WALL CLOCK (OUTDOOR/RAINPROOF)

Dial of a large-sized clock is made of steel except for internal illumination type which is made of acrylic resin. Input signal of a wall type secondary clock is 30-sec. polarized signal/DC 3.6V. Cost for installation work is not included. Power consumption of $\phi 550$ and $\phi 700$ mm types is 18mA, and that of $\phi 900$ and $\phi 1,000$ mm types is 60mA.

550-mm Diameter



FC-503 RoHS

Frame — Steel,
Coffee brown color
Cover glass — Polycarbonate
Thickness — 90mm
Weight — 4.7kg

900-mm Diameter



FC-903 RoHS

Frame — Steel,
Coffee brown color
Cover glass — Polycarbonate
Thickness — 150mm
Weight — 21kg

700-mm Diameter



FC-703 RoHS

Frame — Steel, Coffee brown color
Cover glass — Polycarbonate
Thickness — 99mm
Weight — 7.5kg

FC-7131 RoHS Internal illumination type

Thickness — 170mm
Weight — 11.5kg
All the other specs. are the same as those of FC-703.



FC-707 RoHS

Frame — Stainless steel polished
Cover glass — Polycarbonate
Thickness — 99mm
Weight — 7.0kg

FC-7171 RoHS Internal illumination type

Thickness — 170mm
Weight — 10.7kg
All the other specs. are the same as those of FC-707.



FC-7191 RoHS Internal illumination type

Frame — Steel, Coffee brown color
Cover glass — Polycarbonate
Thickness — 170mm
Weight — 11.5kg

1000-mm Diameter



FC-103 RoHS

Frame — Steel,
Coffee brown color
Cover glass — Polycarbonate
Thickness — 150mm
Weight — 25kg



FC-108 RoHS

Frame — Stainless steel polished
Cover glass — Polycarbonate
Thickness — 150mm
Weight — 25kg



Protector for 700-mm outdoor wall clock

TK-S2 RoHS

Frame — Stainless steel,
Coffee brown color

*Photo example : TK-S2 furnished on FC-703

Controller



AP-4031 RoHS

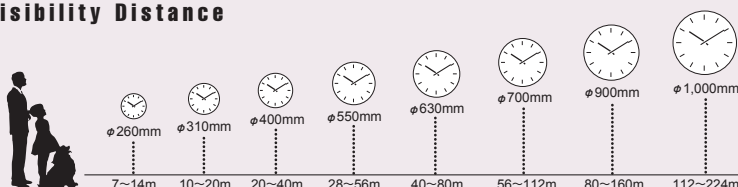
When installing a secondary clock, a controller for exclusive use with it is required (optional).

Controller Case

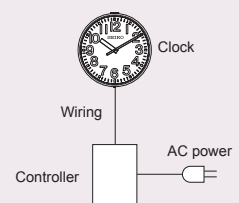


QF-BOX RoHS

Visibility Distance



Configuration of Large-Sized Wall Clock



LARGE-SIZED DOUBLE-FACED POLE CLOCK (RAINPROOF)

Cost for pole and installation work are not included. Input signal of a pole clock is 30-sec. polarized signal / DC3.6V. Power consumption of a pole clock is 18mA×2.

700-mm Diameter



FC-7831

Internal illumination type

Frame — Steel, Coffee brown color
Cover glass — Polycarbonate
Thickness — 300mm
Weight — 20kg



FC-7851

Internal illumination type

Frame — Steel, Coffee brown color
Cover glass — Polycarbonate
Thickness — 300mm
Weight — 20kg



FC-7871

Internal illumination type

Frame — Stainless steel
Cover glass — Polycarbonate
Thickness — 300mm
Weight — 18.5kg

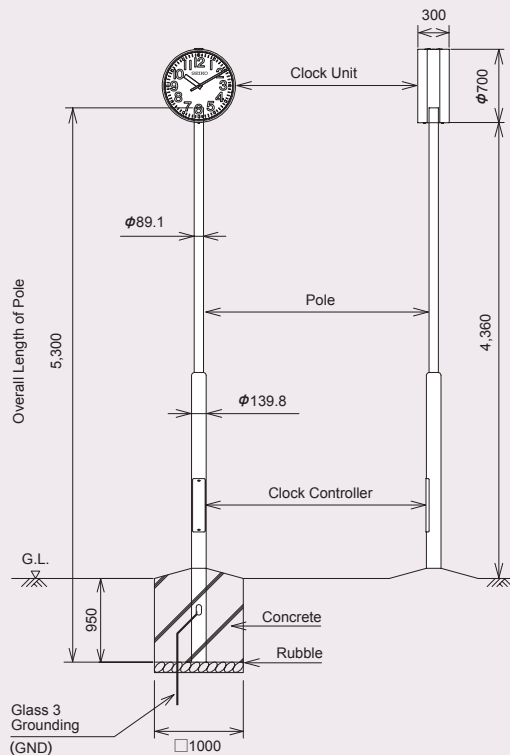


FC-7891

Internal illumination type

Frame — Steel, Coffee brown color
Cover glass — Polycarbonate
Thickness — 300mm
Weight — 20kg

Grounding Work (mm)



(Pole and base are shown here for reference purpose only.)

Controller



AP-4031

When installing a secondary clock, a controller for exclusive use with it is required (optional).

Controller Case



QF-BOX

LARGE-SIZED SUSPENDED TYPE CLOCK (OUTDOOR / RAINPROOF)

700-mm Diameter



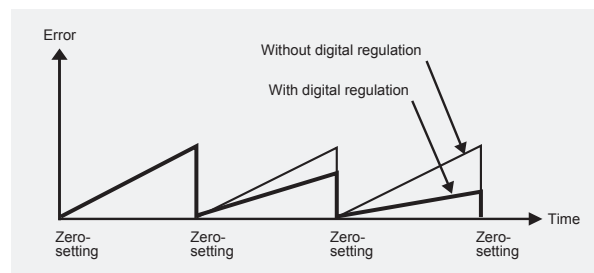
FC-7631

Double-faced type with internal illumination

Frame — Steel, Coffee brown color
Cover glass — Polycarbonate
Thickness — 300mm
Weight — 21kg
Input voltage — DC 3.6V
Current consumption — 18mA×2

Digital Regulation

Gain or loss of the clock controller can be detected and corrected automatically by every zero-setting operation if conducted at regular intervals. This function is called the digital regulation.



Remarks:

In case that an output voltage from a master clock is DC 24V (except QC-5500 Series), you need a resistor adaptor R-700 or R-900 (optional) which has to be connected between the FC-series and the master clock.

SOLAR-POWERED CLOCK

Wall Type : Cost for installation work is not included. Double-faced Pole Type : Cost for pole and installation work are not included.

Wall Type

*SL-10 (Solar Cell Panel) is included.



QF-503 RoHS

Frame — Steel, Coffee brown color
Cover glass — Polycarbonate
Thickness — 90mm
Weight — 4.7kg



QF-703 RoHS

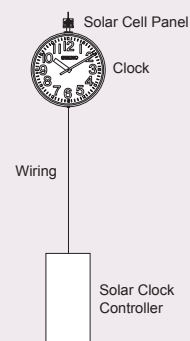
Frame — Steel, Coffee brown color
Cover glass — Polycarbonate
Thickness — 99mm
Weight — 7.5kg



QF-707 RoHS

Frame — Stainless steel
Cover glass — Polycarbonate
Thickness — 99mm
Weight — 7kg

Configuration of Wall Type Solar Clock



Double-faced Pole Type

*SL-10 (Solar Cell Panel) is included.



QF-787 RoHS

Frame — Stainless steel
Cover glass — Polycarbonate
Thickness — 300mm
Weight — 18kg



QF-783 RoHS

Frame — Steel, Coffee brown color
Cover glass — Polycarbonate
Thickness — 300mm
Weight — 19.5kg



QF-785 RoHS

Frame — Steel, Coffee brown color
Cover glass — Polycarbonate
Thickness — 300mm
Weight — 19.5kg



QF-789 RoHS

Frame — Steel, Coffee brown color
Cover glass — Polycarbonate
Thickness — 300mm
Weight — 19.5kg

Controller



QP-4001 RoHS

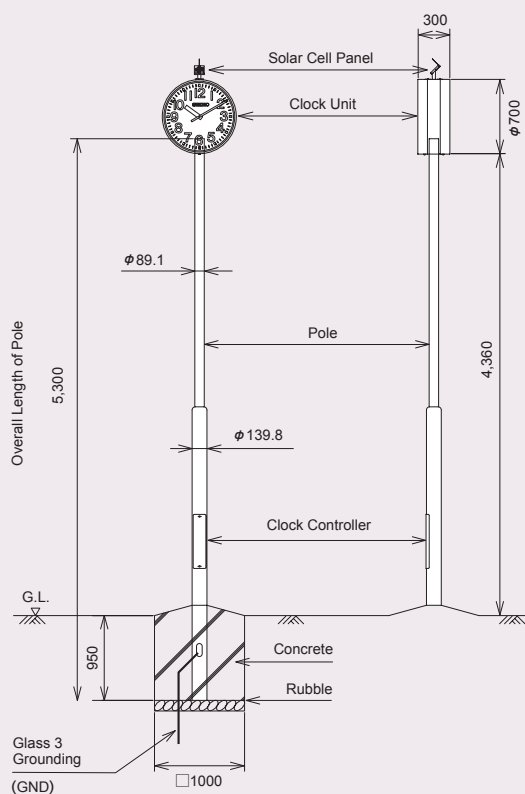
When installing a secondary clock, a controller for exclusive use with it is required (optional).

Controller Case



QF-BOX RoHS

Grounding Work (mm)



(Pole and base are shown here for reference purpose only.)

SEIKO



mark means that the product does not contain lead, cadmium, mercury, hexavalent chromium, polybrominated biphenyl (PBB) and polybrominated diphenyl ether (PBDE) flame retardants referring to the RoHS Directive (2002/95/EC).

2010.9 TO