

Industrial Clock Movement GU 192 / 192t

»Industrial clock movement for outdoor clocks up to 80 cm,
GPS synchronized, autonomous operation for more than six years«



Robust, self-setting, modular movement for outdoor clocks up to 80 cm (with or without illumination) to display hours and minutes.

Model 192 for non translucent dials, 192t for translucent dials.

- Worldwide use and time display accurate to the second due to the synchronization to the time reference of GPS (Global Positioning System).
- Calculation of the local time for more than 50 selectable time-zones.
- Automatic daylight-saving-time change according to the selected time zone.
- Up to 3 movements, type BU 192/192t, can be directly connected to a GU 192/192t.



Autonomous GPS-Clock-Movement

Movement with GPS receiver to display the time accurate to the second.

The utmost precise time-reference of GPS's satellites (Global Positioning System) is being used to synchronize the internal quartz-clock of the GU 192 periodically.

When putting into operation the movement reads time and date from GPS and sets itself automatically to the correct time.

Up to three basis movements BU 192/192t can be synchronized from a GU 192 in cascade connection. A replaceable Lithium-battery powers the movement reliably for more than 6 years.

GPS magnet-antenna in weatherproof casing for mounting outside the clock housing with free view to the sky (zenith $\pm 60^\circ$).

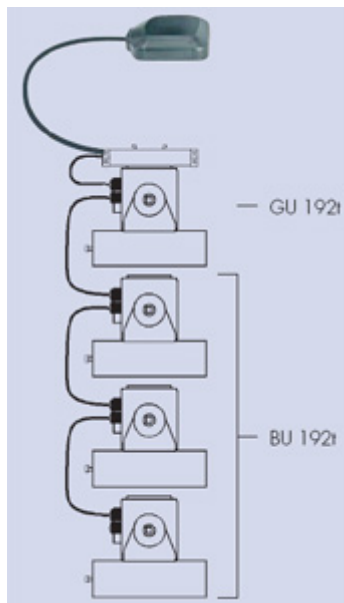
Calculation of the current local time for more than 50 selectable timezones, consisting of time-offset to UTC and a rule for the seasonal daylight-saving-time change.

Remark: the time broadcasted by GPS is UTC (Universal Time Coordinat). The local time is being calculated according to the selected time zone.

Example:

Local-time[Berlin] = UTC + 1 hour + 1 hour during daylight-saving-time

If a suitable time zone cannot be found on the list, a new time zone can be defined by means of a PC program and the serial interface IF 494 (option) and then downloaded from a PC into the movement.



Dimensions

Dimesions table for BU.../FU.../QU... 192 192t

shaft for minute hand A (Ø 4 – 0,02 mm)	18,9	34,0
shaft for hour hand B (Ø 6 – 0,02 mm)	11,9	27,0
thread for central mounting C (M 12x1)	8,4	23,5
distance tube (mm)	-	8,0
maximal dial thickness (mm)	5,0	8,0

GPS magnet-antenna with 5 meter antenna cable L x W x H 50 x 42 x 14 mm.

Antenna plug for connection to the GU 192 movement.