## HL 930 START CLOCK

## TECHNICAL SPECIFICATIONS

## - General

- The Start Clock HL 930 is world-renowned
- 3 separate stepping motors make up this sophisticated movement to control the hours, minutes and seconds hands.
- An integrated GPS receiver ensures the exact synchronization to the official time-of-day at your location.
- In addition to the analogue movement, two seven-segment numeric indicators visually countdown the remaining seconds to each start interval.
- Further, another indicator comprised of a rotating red, green and yellow disk provides information on start validity.
- An acoustic signal rounds out the battery of indicators that serve this start clock


## $>$ Start Intervals

- From 10 seconds to 11 min 55 sec in 5 second increments


## Time Setting

- From internal GPS or manually

Time Base

- 16 MHz Thermocompensated Quartz Crystal
- +/-0,5 ppm at $20^{\circ} \mathrm{C}$
- $+/-2,5 \mathrm{ppm}$ from $-30^{\circ}$ to $75^{\circ} \mathrm{C}$


Inputs

- GPS Antenna Connector
- Timing Impulses
- SYNCRHO and TOP MINUTE signal synchronize other Timing Devices (CP520)
- Remote Control

Outputs

- 1 RS 232 Data output /9'600 bds for Printer or PC (different settings of the Start Clock)
- 25 Pin Connector with multiple outputs of timing signals for lights, additional audio systems or other visual indicators
> Temperature Range
- $25^{\circ} \mathrm{C}$ to $+75^{\circ} \mathrm{C}$ (without heating)
- Power Supply
- Internal : 12V DC rechargeable battery
- External : 12-18V DC source


## > Autonomy

- 18 hours at $20^{\circ} \mathrm{C}$
- 8 hours at $-20^{\circ} \mathrm{C}$
$>$ Housing
- Hot lacquered black aluminum case
- Delivered with its tranport case, charger, GPS antenna and setting software.
> Dimensions/Weight
- 6 kg alone ( $11,5 \mathrm{~kg}$ with transport case)
- $320 \times 500 \times 115 \mathrm{~mm}$
- Clock face diameter : 270 mm
- digits height : 110 mm

