

Electronic clock

APE 4190-xxx

with ARINC output and GPS synchronization

General

The Electronic clock APE 4190-030 has a quartz which drives the internal time base.

The Operation is controlled by micro-controller.

The 6 digits and the 4 digits displays use high contrast transflexive.

type LCD's, the segments of which are white on a black background.

These displays guarantee a wide viewing angle.

The LCD's are back lighted.

The operating modes are controlled by :

- a push button mode selector : DATE (DT), GPS , INT, LOCAL TIME (LT).
- a push button : ET.
- a push-button : CHR.



Mechanical characteristics

Case :

- Ovoid , STANAG 3405.
- Length 4.5 inch (114mm) without connector.

Fixing :

- The clock is mounted from the front of the instrument panel by mean of 2 screws.

Weight :

- 0,334kg \pm 3% maximum.

Paint :

- Bezel and case : Black per FED STD 595 A, colour n°37038.
- Marking and graduation : White per FED STD 595 A, colour n°37875.

Electrical characteristics

Power supply :

- Integral lighting : 5 VAC 400Hz 0.02A.
- Hot Battery bus : 28 Vdc < 0.03A.
- Normal bus : 28 VDC < 0.100A.

Connector :

- MT934T15F19P112.

Output :

- Output ARINC 429 (LS).
- UTC, DATE and identifier able to drive 20 loads.

Input :

- ARINC 429 (LS or HS) used for clock synchronization on GPS signal and the ET function.

Remote control :

- A chrono remote control is available using specialized connector pins.

Lighting :

- Ten white LEDs.
- Automatic dimming.
- General dimming control.

Performances :

Accuracy :

- +/- one second per 24 hours from -40°C to +85°C.

Ageing :

- +/- one second per 200 hours.