

Electronic clock

APE 5100

With ARINC output and GPS synchronization

General

The Electronic clock APE5100-1 has a quartz which drives the internal time base.

The Operation is controlled by microcontroller.

High contrast transflexive LCD's white segments on black background are used to display the functions.

A six digits display allows the UTC reading.

A four digits display allows the elapsed time reading.

A four digits display allows the chrono function reading.

A three positions selector is used for GPS, INT and SET functions.

A three positions selector is used for RUN, STP and RST functions of elapsed time.

A turn and push button allows the updating of the data (DATA/SET).

Two push buttons allow the control of the chronometer (CHR, RST).



Mechanical characteristics

Case :

- H x W : 3.26 Inches x 3.26 Inches (3 ATI).
- Length : 3 Inches behind the front face.

Fixing :

- According to ARINC 408A : clamp mounted.

Weight :

- 1,8 lbs maximum.

Paint :

- Dull black bezel (FES STD 595A)
- Grey case (ASNA 3687-5316).

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 :

- ASN-E-0053 R16B26PNE.

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.

Remote control :

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

Lighting :

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

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Performances :

Accuracy :

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

Ageing :

- +/- one second per 200 hours.