Mode-S Transpondersystem VT-01

EASA Authorization: EASA.21O.384

The VT-01 transponder system has been desinged for use in gliders, microlight aircraft, powered gliders, power planes and umanned vehicles (UAV), operated under VFR and IFR conditions.

Using state of the art components and development tools was essential to fulfill the requirements of lightweight, compact size and low current consumption. The transmitter is fully transistorized. An integrated pressure sensor is making the external alticoder obsolete.

A sunlight readable LCD display provides all informations about current mode, reply and standby code (Mode A/C only) and altitude.

The VT-01 can be installed either as single block system or as two block system with remote control unit. Installations in small cockpits or panels are quite easy then.

The main unit can also be installed in a cradle and is interchangeable between aircrafts of the owner's fleet. The control unit remains in the panel and keeps connected to the static pressure system and the power source of the aircraft.

Specific aircraft information like the 24-bit Mode S address and aircraft registration are stored in the memory of the control unit and will be supplied as well as the altitude information to the main unit.

The system is compliant with the requirements for Mode S transponder systems (EUROCAE ED-73B Level 2 / RTCA DO-181C data link transponder – basic) which are mandated for new aircraft from the beginning of 2005 and for replacement of Mode A/C transponders from 2008. It also meets the requirements for a Mode A/C transponder.

Features:

- Approval in accordance with:
  ETSO-2C112a / ED-73B
- Level 2 / Basic data link compatible
- Use under VFR/IFR conditions
- Integral alticoder:
  Class-1: max. 40.000 ft.
  Class-2: max. 15.000 ft.
- Data input via doubleshaft encoder
- LCD Display
- Fully transistorized (solid state)
  - Smart modular concept for flexible use in different aircraft of the owner's fleet
- Data interfaces for future applications

Technical data:

- Supply voltage: 10-32 V DC
- RF outpur power:
  Class-1: min. 125 Watt @ antenna
  Class-2: min. 75 Watt @ antenna
- Current consumption @ 13,8 V DC:

	Class-1	**Class-2**
Standby, TX not active:	0,005 A	0,005 A
Standby, Squitter active:	0,17 A	0,16 A
normal operation	0,45 A	0,35 A

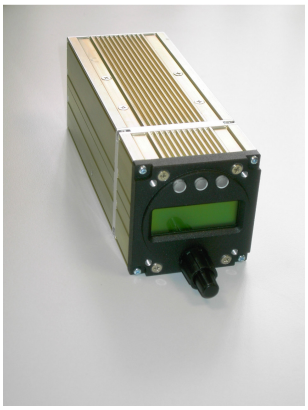
- weight: 0,8 kg
- Dimensions:

  Control unit (WxHxD): 65 x 65 x 45 mm
  (2,55" x 2,55" x 1,77")

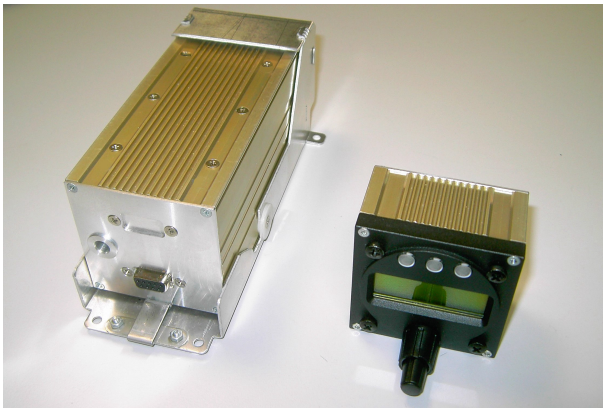
  Main unit (WxHxD): 65 x 65 x125 mm
  (2,55" x 2,55" x 4,92")

  Assembled control unit and main unit :
  65 x 65 x 175 mm
  (2,55" x 2,55" x 6,88")

  Through hole panel installation in 57mm (2,25") opening.



Oneblock system



Twoblock system mit Cradle.

Partnumbers:

VT-0101-()-()-():	Steering unit
VT-0102-()-()-()-070	Central unit, Class-2
VT-0102-()-()-()-125	Central unit, Class-1
VT-0103-1-()-()	Installation kit with Cradle
VT-0103-2-()-()	Installation kit w/o Cradle

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