



# MODE S Transponder - 160mm CLASS I, Level 2 es

## BXP6403-1-(01)

Compact Line/Surveillance



The BXP6403-1-(01) is a compact and lightweight single block Mode-S transponder. It is certified according to ETSO-2C112b and is suited for VFR and IFR operations up to 50.000 feet.

The transponder is equipped with extended squitter and SI code function and it provides an interface to the central aircraft data system. It allows ELS, supports EHS, as well as ADS-B via extended squitter.

The Mode S ICAO address and additional fixed data are stored in a separate address module, AM6400-1-(01), which is plugged on to the transponder and remains in the aircraft when the transponder is exchanged.

The BXP6403-1-(01) is designed for slide-in mounting (tray available) and fits into a 160.3 x 41.28 mm cut out. The use of an adapter (available as accessory) allows for retrofit in a KT 76 A tray.

Panel inscriptions and sunlight readable display can be illuminated and dimmed for night operation. The display shows the actual settings.

The range of power supply voltage and the low power consumption make this transponder suitable for a wide range of aircraft.

The transponder is prepared for the connection of blind encoders from different manufacturers. The encoder can be connected to the transponder by a serial or a parallel interface.

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#### Technical data:

- Supply voltage 10.0 V to 33.0 V DC
- Current consumption typical, without illum.
  - Operation 0.43 A at 14 V  
0.25 A at 28 V
  - Standby 0.22 A at 14 V  
0.14 A at 28 V
- Power-up time 2 sec. (internal self-test)
- Ext. fuse protection 5 A slow-blow
- Operating temperature -20°C to +65°C (short-time +70°C)
- Storage temp. -55°C to +85°C
- Operating altitude ≤ 50.000 ft
- Operating modes Mode A, Mode A+C, Mode S
- Mode S Level 2 es
  - extended squitter
  - surveillance ident.
- Vibration resistance in accordance with EUROCAE/RTCA ED-14D/DO-160D Cat. S. Curve M
- Humidity in accordance with EUROCAE/RTCA ED-14D/DO-160D Cat. A / + 50°C; 95%, 48 h
- Dimensions
  - Core height 38.0 mm
  - Panel height 42.0 mm
  - Core width 156.0 mm
  - Panel width 160.6 mm
  - Core depth 155.0 mm
- Weight approx. 1 kg
- Certifications ETSO - 2C112b  
EASA.210.717
- Interfaces Altim. serial and parallel  
Avionics data link processor

#### Receiver data :

- Receive frequency 1030 MHz ± 0.2 MHz
- Sensitivity (MTL) - 74 dBm +/- 3 dB
- Selectivity ± 15 MHz > 40 dB  
± 25 MHz > 60 dB
- Dynamic range ≥ 60 dB
- Side lobe suppression 3-pulse method (A/C)  
P5 (Mode S)
- Nominal impedance 50 Ω

#### Transmitter data:

- Transmit frequency 1090 MHz ± 1 MHz
- Transmitter type Solid state
- Transmit power ≥ 250 W
- Reply rate limitation 500...1200 replies / sec.  
configurable
- Nominal output 50 Ω impedance

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