

BECKER COM

COMMUNICATION



BECKER BXP6401-1-(01) - MODE S Transponder

CLASS I, Level 2 es

■ The BXP6401-1-(01) is a compact and lightweight single block Mode-S transponder. It is certified according to ETSO-2C112a and is suited for VFR and IFR operations up to 50000 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.

BXP6401-1-(01) is designed for panel mounting and fits into a 2 ¼ inch cut out. A split version is also available.

The 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.

BXP6401-1-(01) is directly exchangeable with the ATC4401-1 as the dimensions are the same and the main connector has the same pin assignment. ■

Technical data

General 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 + 55°C (short-time + 70° C)
✓ Storage temp.	- 55° C to + 85° C
✓ Operating altitude	≤ 50000 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. V. Curve G
✓ Humidity in accordance with EUROCAE/RTCA ED-14D/DO-160D	Cat. A / + 50° C; 95 %, 48 h
✓ Dimensions	61.3 x 61.3 x 205 mm (H x W x D)
✓ Weight	approx. 0.8 kg
✓ Certifications	ETSO – 2C112a, EASA.21O.322
✓ 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

Split versions available

Control Unit CU6401-1-(01)

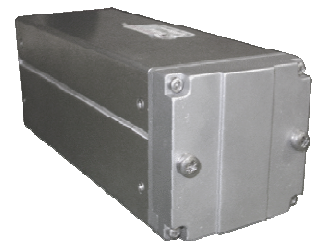
✓ Operating temperature	- 20°C to + 55°C (short-time + 70° C)
✓ Dimensions	61 x 61 x 65 mm (H x W x D)
✓ Weight	approx. 0.2 kg

Remote Transponder BXP6402-1R-(01)

✓ Operating temperature	- 40°C to + 55°C (short-time + 70° C)
✓ Dimensions with address module	61 x 61 x 215 mm (H x W x D)
✓ Weight with address module	approx. 0.7 kg



CU6401-1-(01)



BXP6402-1R-(01)



AM6400-1-(01)