



BECKER COMPACT LINE

COMMUNICATION & NAVIGATION



ATC 4401

Full Solid State Single Block Transponder

■ The ATC 4401 has been designed as a part of the Becker Compact Line for all aircraft and helicopters where small dimensions and light weight are essential. It has the same look and similar size as the successful transceiver AR 4201. The mounting behind the panel is as simple as for the AR 4201.

Outstanding performance combined with low power consumption is provided in two certified versions

ATC 4401-250 with min. 250 Watt transmit power
ATC 4401-175 with min. 175 Watt transmit power

Both versions are state of the art designs with fully transistorized transmitters and compliant with the current, most stringent operating standards.

The ATC 4401 is of course certified according JTSO and TSO regulations.

The sunlight readable display is illuminated for night operations. The display shows in addition to the transponder code also the current flight level, if an encoding altimeter is connected and Mode-C is selected. Despite the small size, the operation is simple and straight forward. It even allows the one button recall of two preselected codes.

The ATC 4401 operates from 9.5 to 32.2 V DC. This makes it suitable for almost every application in general aviation.

A standard encoding altimeter or blind encoder can be connected. ■

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AVIONIC SYSTEMS

Becker Flugfunkwerk GmbH

Technical data ATC 4401

General data:

| | |
|---|---|
| ■ Supply voltage | 9.5 V to 32.2 V DC |
| ■ Typ. consumption at (without panel illum.) | 5544 (1200/sec) 0.50 A at 13.75 V (250 W) 0.40 A at 13.75 V (175 W) 0.30 A at 27.5 V (250 W) 0.25 A at 27.5 V (175 W) |
| – in standby mode | 0.27 A at 13.75 V 0.14 A at 27.5 V |
| ■ Panel illumination | ≤ 0.10 A at 13.75 V ≤ 0.05 A at 27.5 V |
| ■ Power-up time | 3 sec. (internal self-test) |
| ■ Ext. fuse protection | 3 A slow-blow |
| ■ Serial interface | RS 422 (9600 baud) |
| ■ Operating temperature | - 20 °C to + 55 °C (short-time + 70 °C) |
| ■ Storage temperature | - 55 °C to + 85 °C |
| ■ Operating altitude in accordance with EUROCAE/RTCA ED-14D/DO-160D | 35000 ft. Cat. C1 |
| ■ Vibration resistance in accordance with EUROCAE/RTCA ED-14D/DO-160D | Cat. NM |
| ■ Humidity in accordance with EUROCAE/RTCA ED-14D/DO-160D | Cat. A / + 50 °C; 95 %, 48 h |
| ■ Mechanical dimens. | |
| – Front panel | 61.3 x 61.3 mm (H x W) (2.413 x 2.413 inch) |
| – Case depth | 204 mm (8.031 inch) |
| ■ Weight | 0.725 kg (1.598 lb) |
| ■ Test and assembly standards | RTCA DO-150 TSO/JTSA C74c, C88a EUROCAE MPS/WG9/1-71 |

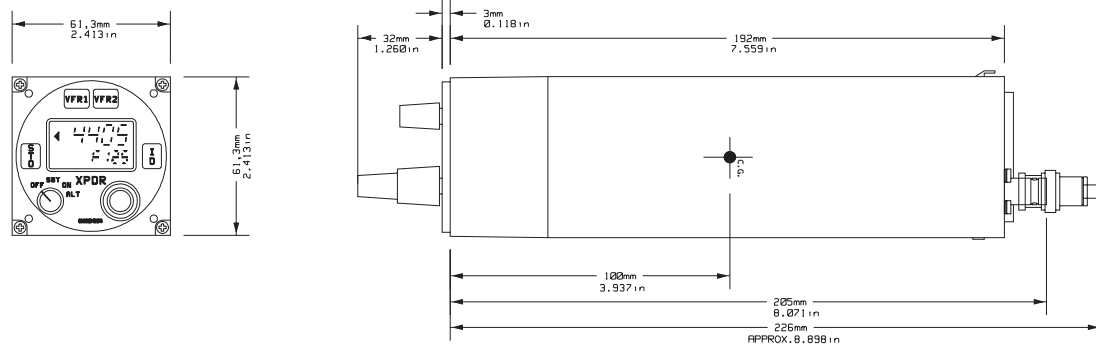
Receiver data:

| | |
|-------------------------|--------------------------------------|
| ■ Operating modes | ModeA ModeA+C |
| ■ Receive frequency | 1030 MHz ± 0.2 MHz |
| ■ Sensitivity (MTL) | - 74 dBm (for 90 % reply rate) |
| ■ Selectivity | ± 15 MHz > 40 dB ± 25 MHz > 60 dB |
| ■ Dynamic range | ≥ 60 dB |
| ■ Bandwidth | ± 3 MHz < 3 dB |
| ■ Side lobe suppression | 3-pulse method |
| ■ Nominal impedance | 50 Ω |

Transmitter data:

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|------------------------------|---|
| ■ Transmit frequency | 1090 MHz ± 3 MHz |
| ■ Transmitter type | Solid state |
| ■ Transmit power | min. 250 W / 175 W at antenna socket |
| ■ Reply limitation | effective as from 1200 replies / sec. |
| ■ Nominal output impedance | 50 Ω |
| ■ Reply code (mode A) | ICAO coding system with 4096 reply possibilities |
| ■ Flight level code (mode C) | ICAO coding system 100-foot steps from - 1000 to 35000 ft. |
| ■ Transmit pulse shape | pulse width 0.45 μs ± 0.1 μs rise time 0.05 to 0.1 μs fall time 0.05 to 0.2 μs |

Product specification and design features may be altered without notice



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