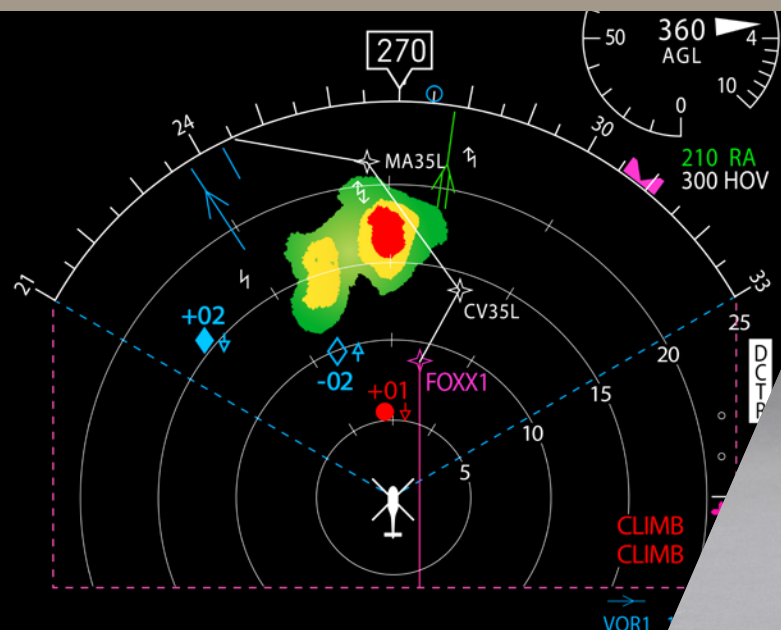


# TTR-4100 Traffic Alert and Collision Avoidance System (TCAS II) traffic computer for helicopters



NextGen® traffic surveillance and alerting in a lightweight, highly capable system.

In response to industry initiatives to improve the safety of helicopter operations, Rockwell Collins has introduced the TTR-4100 TCAS II traffic computer as a new-generation Traffic Alert and Collision Avoidance System.

Compared with basic TCAS I or Traffic Advisory Systems typically installed on helicopters, TCAS II provides helicopter pilots not only detection of other aircraft, but also automated resolution advisories. By providing both aural and visual alerts, a TCAS II system advises the pilot on what action to take – decreasing the need to acquire visual confirmation of the traffic threat and consult with air traffic control before taking action. This benefits the pilot by reducing workload while enabling a faster response to impending traffic conflicts.

By providing a more complete situational awareness picture, the TTR-4100 improves operational safety and mission effectiveness – especially at night or in poor weather conditions that reduce a pilot's ability to see other aircraft and maintain necessary separation.

Already certified by the Federal Aviation Administration (FAA) and European Aviation Safety Agency (EASA), the TTR-4100 offers both weight and capability advantages over previous generation systems, making it the ideal solution for size-, weight- and power-constrained airframes.

The TTR-4100 is certified as optional equipment on many medium and heavy commercial helicopters, including the Airbus Helicopters H225 and H175, the AgustaWestland AW189 and AW169, and the Sikorsky S-92.

## ESTABLISHED DESIGN WITH PROVEN CAPABILITIES

Working with industry partners, in 2008 Rockwell Collins became the first avionics manufacturer to develop and certify TCAS II for helicopter operations. Building on this success, the TTR-4100 TCAS II traffic computer incorporates technology from the integrated surveillance system Rockwell Collins designed for the Boeing 787.

By combining the surveillance capabilities of a commercial aircraft with helicopter proven hardware, the TTR-4100 provides the highest level of safety available for traffic avoidance. Ready for future upgrades to Automatic Dependent Surveillance-Broadcast (ADS-B) In\*, its extensive array of state-of-the-art features enhances safety and situational awareness in today's increasingly crowded airspace.

When combined with dual Rockwell Collins TDR-94 Mode S transponders, the TTR-4100 provides helicopter operators with a complete traffic awareness and threat avoidance system.

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## KEY FEATURES

- ADS-B In\* provisioned
- TCAS II Version 7.1 compliant
- Certified by FAA TSO C119C, DO-185B, DO-178B, DO-254, DO-160F
- Certified by EASA TSO C119C, ED-143, ED-12B, ED-80, ED-14F
- 30-target display capability
- 30 to 40 NMI traffic surveillance range
- 5-degree RMS bearing, accuracy, 10 peak

\*ADS-B In will be subject to the release of future service bulletins.

## ADVANTAGES OF CONTINUAL INNOVATION

As the next-generation TCAS from Rockwell Collins, the TTR-4100 replaces the TTR-4000, which was an established market leader and is in use aboard medium and large helicopters around the world.

All Rockwell Collins products are continually refined to deliver optimum performance, reliability and efficiency. The TTR-4100 traffic computer features a simplified design, which requires no manual tuning. It also delivers higher reliability while minimizing long-term parts obsolescence. These improvements are complemented by lower system power consumption and an overall weight reduction of nearly 4 pounds when compared with previous TCAS systems.

The Rockwell Collins TTR-4100 TCAS II system consists of one transmitter/receiver, two TRE-920 TCAS directional antennas, with an optional control panel and cockpit display for installations not requiring integration with existing avionics displays.

## SPECIFICATIONS

|                |   |
|----------------|---|
| Part number    | 822-3075-001  |
| Size           | 4 MCU: 7.64" H x 5.06" W x 15.26" D<br>(194.06 x 128.52 x 387.6 mm) |
| Weight         | 13.7 lbs. (6.2 kg) max,<br>12.7 lbs. (5.8 kg) nominal               |
| Power required | 28 V DC, 50 W max, 35 W nominal                                     |

## SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

## Building trust every day.

Rockwell Collins delivers smart communication and aviation electronic solutions to customers worldwide. Backed by a global network of service and support, we stand committed to putting technology and practical innovation to work for you whenever and wherever you need us. In this way, working together, we build trust. Every day.

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