

Operational Description

The TPA-100 series is the latest addition to Honeywell's Traffic Alert and Collision Avoidance (TCAS) product line. The unit is designed to meet the RTCA DO-185A TCAS II requirements and the RTCA DO-160D environmental/EMI/HIRF requirements. Each unit described below will be certified to Technical Standard Order (TSO), C119b.

This TCAS product line includes both commercial and military 6MCU and 4MCU ARINC 600 processors. The commercial 6MCU unit, p/n 940-0300-001, is designed for installation on air transport category aircraft. The ARINC 600 6MCU size designation indicates the unit is approximately 6-7 inches wide, while a 4MCU unit is approximately 4-5 inches wide. The commercial 4MCU unit, p/n 940-0400-001, is intended to be installed on business and regional aircraft. The military version, p/n 940-0330-001, is designed for use on airlift/ tanker aircraft, commonly known as MILACAS-XR. Each part number described above is based on the same hardware design and platform. There is no difference in hardware configuration between these units. The difference between the 4 and 6MCU is simply external case packaging. The military unit uses the identical hardware as the commercial unit, the only difference is software functionality.

The mechanical design of the TPA-100A is based on revolutionary, yet fundamental concepts, which take advantage of today's technology. A Liquid Crystal Display (LCD) is located on the front cover of the processor. The LCD can display configuration, system and LRU health status and report fault isolation data. A PCMCIA card slot is also located on the front cover, which will enable software loading and recording of flight information. The TPA-100A can record up to 60 Traffic Alert (TAs) and 10 Resolution Advisories (RAs). The unit will operate on either 115 VAC or 28 VDC power and does not require external cooling.