

TTA-12S

TERRAIN AWARENESS AND WARNING SYSTEM (WITH BUILT-IN GNSS SENSOR)

TTA-12S is intended for providing flight crews with sufficient information and alerting allowing the potential danger of collision with the terrain and/or obstacle to be identified in time, and effective measures to be taken in order to prevent a controlled flight into terrain.



The system is designed as a small-size unit containing a database removable data storage, necessary controls and displays, and the GLONASS/GPS sensor. This allows simple installation, shorter communication line, easy operation, maintenance and database updating. The database updating process takes from two to five minutes. The use of up-to-date electronic

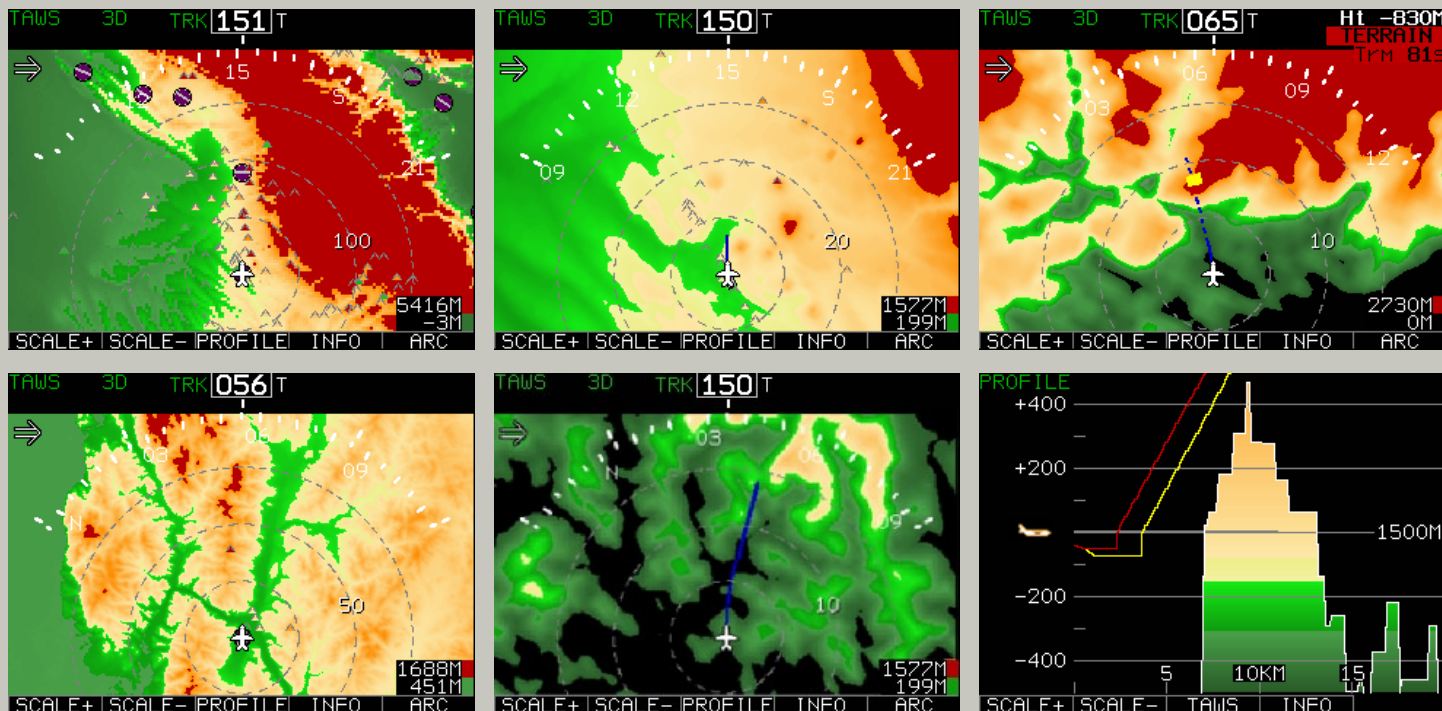
components and real-time operating system ensures high processing speed (check of alert envelopes for all the modes and formation of a picture at a rate of 10 times a second). Warm-up time is 6 seconds. The system implements all the modes of ground proximity warning (GPWS) class systems, forward looking terrain awareness (FLTA) function, premature

descent alert (PDA), voice callout modes for passing preset altitudes, terrain display formation function. In addition to the mandatory modes, the system implements some additional modes and algorithms improving the flight safety and crew awareness of the current situation reducing the number of false alerts.

The use of the specially developed TAWS Track Viewer tool (certificate of authorship 2005610668) allows prompt identification of undesirable alert sources: the system malfunction, airborne equipment failures, flying errors. The capability to obtain objective system operation results, considerably superior to the capabilities of a standard flight data recording system, ensures the system "transparency" and confidence in it on the part of the crew.

TTA-12S is operated on the following airplanes:

An-124-100, Tu-154M, Tu-154B, Il-76TD, Il-76MD, Il-86, An-74-100, Il-62M, Yak-42.



MAIN TECHNICAL CHARACTERISTICS

Unit	TTA-12S
Processor	32-bit RISC
Interface:	
ARINC-429 inputs	4
ARINC-429 outputs	2
discrete signal inputs	6
discrete signal outputs	8
ARINC-646 (Ethernet)	1
Supply voltage	+27 V
Потребляемая мощность	15 W
Dimensions	156 x 64 x 165 mm
Warmup time	6 s
Environmental	Temperature: - operating: -40°C... +70°C - min/max: -50°C... +85°C
Weight	1,350 ±0,135 kg.
Warranty period	3 years