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advanced image engineering

Airborne Image Transmission

- Immediate Picture Transmission
- Real-time Video Recording
- MIL1553/ARINC-429 Controllable
- Rugged, Lightweight & Compact



military

Intelligence Gathering

Damage Assessment

Coastal Patrol Reconnaissance



Main Features

The TVDCU is designed for use on airborne fixed wing and rotary wing platforms.

The two major functions are:

1. To enable the operator to capture video frames from an external video source and store these images on a mass storage unit. The system can capture and store a number of video frames/clips in real time, while flying over a target. At a later stage the operator can select the appropriate video frame for transmission by viewing the video output on an externally connected display. The system also allows the operator to capture and transmit in one single operation. Received video frames are stored in the mass storage unit and can be viewed on a MFDU. The control of the video functions is via discrete inputs. The system enables stored video frames/clips to be downloaded once the aircraft is back at base.
2. To transmit tactical information via the radio network to other members on the task team. This tactical information can consist of either track messages, ESM contacts or video images. The system is capable of both transmitting and receiving of tactical information. The system can interface with up to three tactical radios.

The tactical track, ESM contact messages and own Nav data are passed to the TVDCU via a MIL-1553 bus and reformatted into LINK-ZA format before being transmitted over the radio network.

GENERAL	
Size H x W x D	195 x 125 x 260
Weight	5.43 Kg
Power supply	28 VDC nominal +/- 10 VDC
Power consumption	< 30 Watt
QUALIFICATION	
EMI/EMC	Mil-STD 461 C
Mechanical	Mil-STD 810 E
Software	RTCA DO178- Level C
VIDEO INTERFACES	
Video inputs	2 PAL inputs single ended or balanced
Video outputs	2 PAL inputs single ended or balanced
Resolution	720 x 576
Compression	MJPEG or MPEG optionally
Recording Time	2 hours min @ high resolution
GENERAL INTERFACES	
MIL-1553 Dual redundant	Control and data
3 individual RS 422/RS485	Radio data port interfaces
7 Discrete	Video control functions optically isolated
RS485/RS422 Control interface	Optional RS422 Control interface

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