



TRA 2020

V/UHF AM AIRBORNE TRANSCEIVER

- > 118 - 400 MHz
- > 8.33 & 25 kHz channel spacing
- > ICAO FM Immunity
- > KY58 / KY100 compatibility
- > ARINC 429 / MIL-STD 1553B
- > DF and homing capability
- > 2 MCU (1/4 ATR)
- > Compact & Lightweight
- > BITE

TRA 2020

DEVELOPED FOR AIR-TO-GROUND AND AIR-TO-SURFACE COMMUNICATION NETWORK

- > multi-band
 - ATC band VHF
 - Civil Maritime band VHF/FM
 - Aeronautical military band UHF AM/FM
- > ICAO regulations
 - 8.33 kHz
 - FM immunity
- > Secure communications
 - compatibility KY58 / KY100
- > Cost-effective
 - new and refit program

GENERAL CHARACTERISTICS

Frequency range	VHF AM	118 - 156 MHz
	UHF FM	225 - 400 MHz
Channel spacing		25 kHz and 8.33 kHz (option)
V/UHF Channels Presets		With TC20 Remote Control Unit
Frequency accuracy		± 5 ppm, - 40°C to +70°C
Power supply		+ 28 V DC
Power consumption		
	Operating Receive	< 35 W
	Operating Transmit	< 200 W
Landing Gear Locked monitoring		Beep A2 transmitted
T/R operating cycle		1mm / 5mm Nominal
MTBF		2.000 hrs (MIL-HDBK-217E)
Control		MIL-STD-1553 or ARINC 429
BITE		T/R and RCU TC20

ENVIRONMENT

EMC		MIL-STD-461 C
Temperature range	Operating	-40°C to +70°C
	Storage	-55°C to +85°C
Humidity		95 % relative
Altitude		65.000 ft (20.000 m)
Vibration		Fixed & rotary wing aircraft
Shock		15 g, 9 ms

PHYSICAL

Size and connector		1/4 ATR ARINC 404 (2MCU ARINC 600)
Dimensions	L x W x D mm (in)	356 (14) x 57.15 (2.25) x 193 (7.6)
Weight	Kg (lbs)	4.4 (9.7)

MAIN RECEIVER

Sensitivity	Better than - 101 dBm
Squelch	Basic
Audio output	100 mW / 600 Ohms
Audio monitoring	Basic
Fast guard	243 MHz
DF Wide Band output	300 to 10.000 Hz

GUARD RECEIVER

Independent guard receiver (option)	
Frequency	243 MHz
Sensitivity	Better than -98 dBm

TRANSMITTER

Nominal output	Nominal	10 W
	Reduced power	3 W
	Low Probability Intercept (LPI)	3 mW
Modulation		AM 80%
Harmonic Power		2 nd and 3 rd ≥ 60 dB
Spurious frequency rejection		≥ 80 dB
Self protection		VSWR (Reduced Power)
Side tone output		50 mW / 600 Ohms

INSTALLATION

The TRA 2020 family includes a large choice of:

- > Main & antenna coaxial connectors (ARINC 404 & circular)
- > Mounting tray: plate integrated or external, and RCU

ANCILLARIES

Remote Control Unit (RCU)	
TC20 family:	NVIS capability
	Choice of colors
	Choice of power lighting
V/UHF antenna	
Installation kit	

THALES

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