

# SAMTEL

COLOR CATHODE RAY TUBES FOR  
MILITARY AND CIVIL APPLICATIONS



Designed specially for airborne requirements  
High resolution shadow mask CRT  
Employing black matrix and red, green, blue phosphors  
High performance inline uni-potential and bi-potential electron guns  
Electrostatically Focused  
Magnetic Beam deflection  
Deliverable in sizes 3" to 8" diagonal

All CRT's are mounted in a metal housing to sustain tough environmental conditions of avionics and MIL applications.

## APPLICATIONS

CRT's can be used in a wide variety of applications like civil and fighter aircraft, helicopters, ground vehicles for Military applications and flight simulators.

## SPECIAL FEATURES

Good resolution: up to 0.5mm half brightness line width  
High brightness: According to application requirements  
Contrast: Optimized requirements with optical filters and AG / AS coatings

## ENVIRONMENTAL TEST CONDITIONS CONFORMING TO

Vibration and shock up to 0.02 g<sup>2</sup> / Hz random, in each axis  
Temperature -55 to +85 deg.C  
Humidity 95%  
Altitude up to 20,000 meters

CLEAR - ROBUST - CUSTOMISED

# TECHNICAL SPECIFICATIONS

CRT Size Range	6"x6"	5"x5"	3" to 8" diagonal
Phosphor RGB	P22 P43 P22	P22 P43 P22	P22 P22/P43 P22
Anode Voltage (KV)	22	18	15 25
Focus Voltage (KV)	5 4~7	3 2~3 8	3~8
Grid2 Voltage (V)	600	300	300~1000
Heater Voltage (V)	6.3	6.3	6.3
Typical Green Brightness (Cd/m2)	800	550	900 max
Typical Line Width	0.5mm	0.5mm	0.3~0.6mm
Face reflection Bare tube %	23	23	23
Face transmission%	85-90	85~90	85~90
Mask Pitch (mm)	0.3	0.3	0.2~0.3
Mask Type	Dot type	Dot type	Dot type
Cathode	Indirectly Heated	Indirectly Heated	Indirectly Heated
Brightness Modulation	Cathode	Cathode	Grid 1
Type of shielding	Mu-Metal (0.5 and 1m thick)	Mu-Metal (0.5 and 1m thick)	Mu-Metal (0.5 and 1 mm thick)
Deflection Yoke and multi-pole	Toroid raster & stroke scan	Toroid raster & stroke scan	Toroid & saddle raster & stroke scan
Diagonal Deflection Angle(Degree)	63	55	45~90
Potting Material	Silicone/epoxy/foam	Silicone/epoxy/foam	Silicone/epoxy/foam
Cables and connectors	As per application	As per application	As per application
Typical Life (min.)	10,000 hrs	10,000 hrs	10,000 hrs
Customized to	Airbus application	Airbus application	Customized to application

Technical Specifications are subject to change without prior notice

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