



Advanced Visualization

PU-2000

A653 capable Processing Unit



Main features:

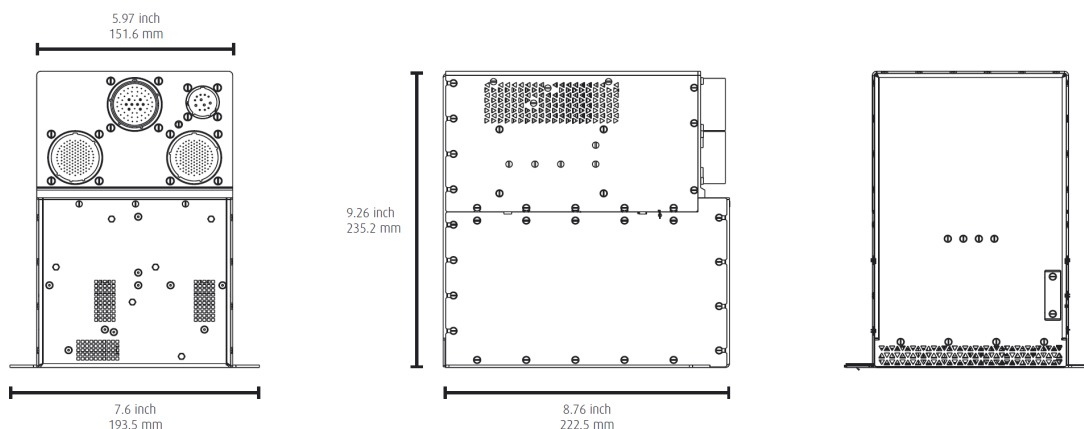
- Powerful processing and graphics
- ScioTeq's MOSArt™ middleware platform for hosting multiple software applications at different DAL levels
- Compliant with DO-178B
- Large array of Input and Output interfaces

The PU-2000 is a multi-capability Processing Unit intended for use as a Symbol Generator in both new and retrofit Electronic Flight Instrument Systems. The unit is designed to process high-criticality data, to generate various display formats, such as PFD, MFD or EID and to overlay symbology.

Thanks to its highly flexible, modular design, the PU-2000 can also be used as a common computing platform in a large variety of functions, with or without graphics capability: mission computers, customer-supplied or ScioTeq-developed single software platforms, etc.

Thanks to its MOSArt architecture (Modular Open System Architecture for real time avionics applications), the PU-2000 Processing Unit can host various software applications with different criticality levels. This enables customers to develop or port their application on ScioTeq hardware while preserving the different criticality levels. Importantly, these hosted applications can be individually designed to varying Design Assurance Levels (DAL), reducing development and integration costs.

Technical specifications



PU-2000

Processing	
Computing & Graphic module	PowerPC based CPU, OpenGL ES SC capable GPU
RTOS	ARINC-653 WindRiver Vxworks RTOS
ScioTeq MOSArt™ open platform	Allows development and hosting of customer supplied, 3 rd party or ScioTeq applications. Can host multiple applications at different DAL levels simultaneously.
Interfaces	
Video Outputs ⁽¹⁾	2 dual-head (independent) DVI outputs + 2 additional DVI outputs (copies) Analog video output (CVBS)
Video Inputs ⁽¹⁾	2 analog video inputs (1 RGB, 1 CVBS)
Control Interfaces ⁽¹⁾	Up to 60 discrete I/Os Up to 24 ARINC 429 inputs Up to 8 ARINC 429 outputs Up to 2 ARINC 708 inputs Single or double dual redundant MIL-STD-1553B (busses A&B or A,B, C&D) Up to 16 analog inputs 2 Ethernet connections 2 RS-422/485 I/Os 3 RS-422 I/Os Mass memory Some combinations of the above I/O may be restricted. Contact ScioTeq for details or other custom options.
General specifications	
Power supply	28VDC, MIL-STD-704A
Power consumption	< 60W (operating - typical)
Weight	4.5 kg / 9.9 lbs (typical)
Cooling	Forced air cooling via cold wall
Dimensions (WxHxD)	156.6mm (Width) x 235.2mm (Height) x 222.5 mm (Depth incl. connector flange)
Software	developed to RTCA/DO-178B DAL B, capable of hosting applications up to DAL B
Environmental conditions	
Compliance	DO-160G; (optional MIL-STD-810G & MIL-STD-461E)
High temperature	+55C operational / +70C short-time / +85C ground survival
Low temperature	-45C operational / -55C ground survival
Altitude	50,000 ft

⁽¹⁾ Please contact ScioTeq for other possible options

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 The information and data given are typical for the equipment described. However any individual item is subject to change without any notice.

AD-PU-2000_20-001

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