



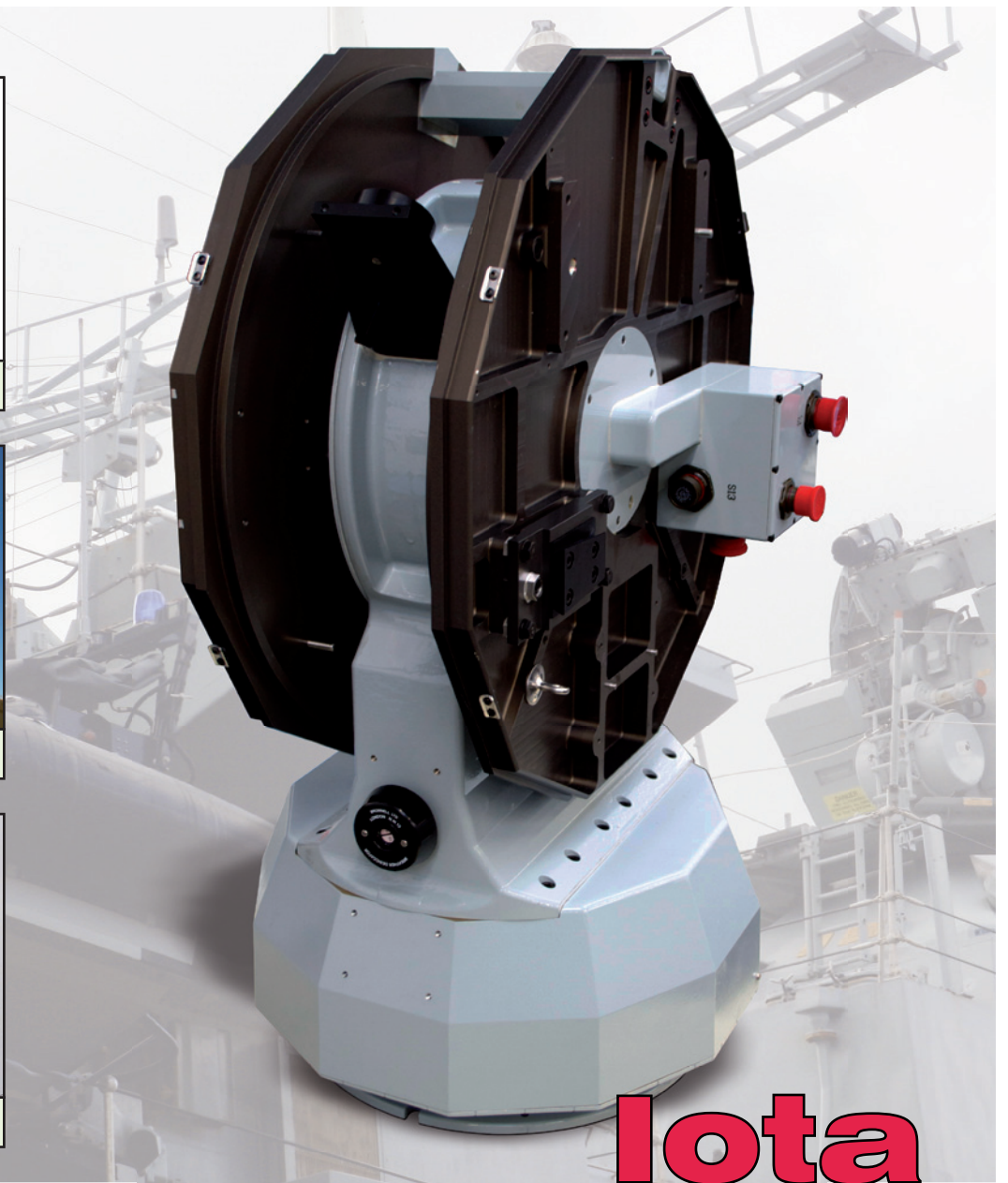
Stabilised Naval Application



Stabilised Vehicle Application



Naval fire control system



Iota



Tracking & Surveillance Director

The IOTA Electro-Optical Director (EOD) is a high performance direct drive positioning and tracking platform.

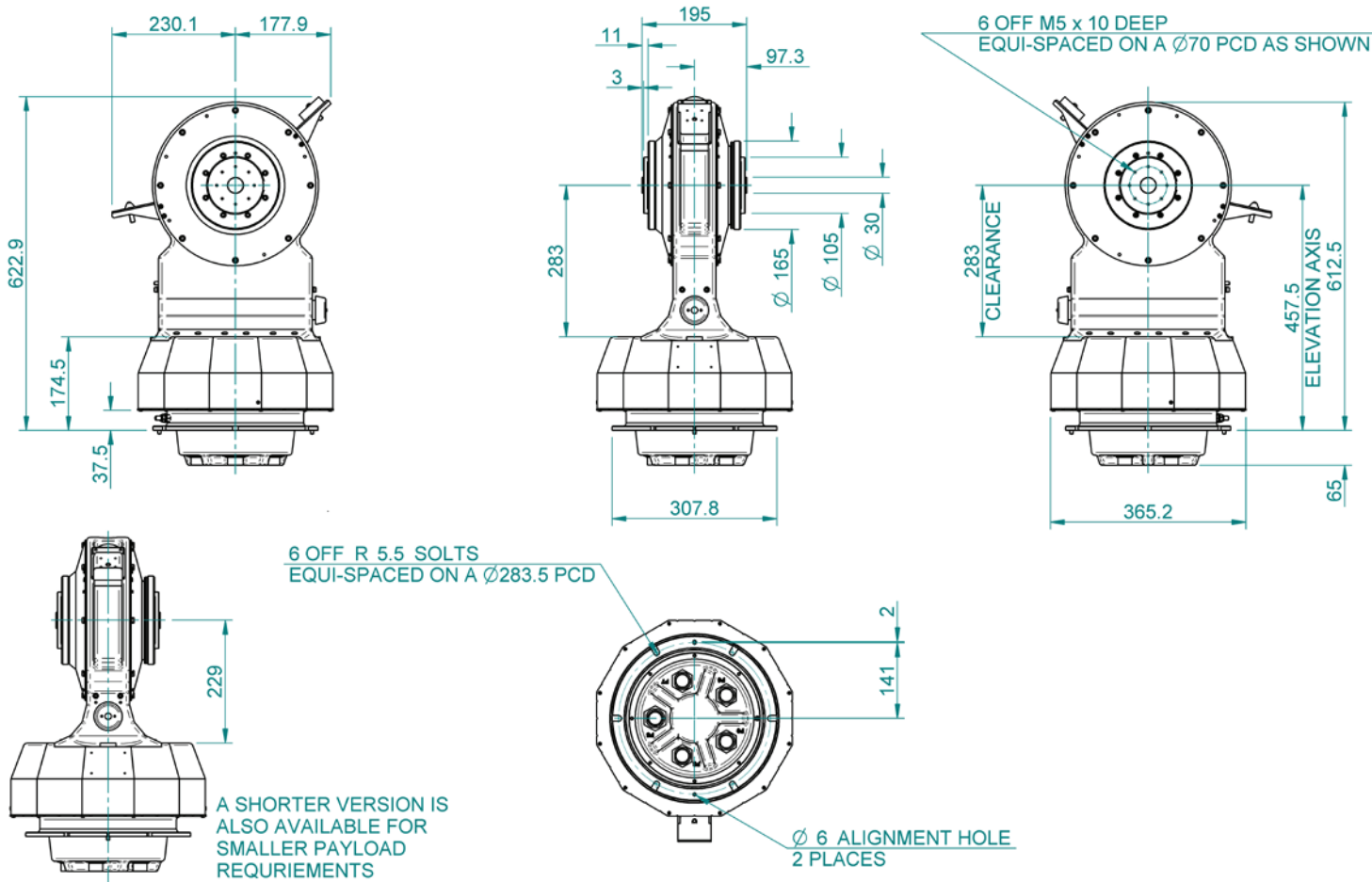
It has been specifically developed for accurate control of optical payloads in demanding applications such as; weapon control, long range surveillance, dynamic motion stabilisation and micro-radian absolute positioning and pointing.

The IOTA offers the customer outstanding versatility and reliability due to its efficient T-shaped design, and rugged build. The T-shaped design allows for numerous payload configurations for a wide range of the industries leading sensors, but this can also be adapted into a 'yoke' or L-shaped design depending on requirement. IOTA has been integrated into UK Royal Navy Vessels since 2005, and over 60 Army and Navy variants have been sold throughout the world.

- Versatile accurate platform
- 360° azimuth rotation
- World renowned for reliability and maintainability
- In active service with UK Royal Navy
- Can accommodate large payloads through T, L and Yoke configurations
- Stabilised version available

For highly accurate tracking & surveillance in Land & Maritime applications





Iota Technical Specification

General

Iota Mass	46Kg	
Total Payload Mass	60Kg Dynamic	100Kg Static Balanced

Mechanical

Azimuth	Rotation	360° x n
	Electrical Endstops	Optional
	Software Endstops	Optional
	Slewing Speed	120°/sec
	Pointing Accuracy	0.5mRad
Elevation	Rotation	-20° to +87°
	Electrical Endstops	-15° to +85°
	Software Endstops*	-12° to +82°
	Slewing Speed	100°/sec
	Pointing Accuracy	0.5mRad

*Angles may vary depending on application

Environmental	Standard	Enhanced/COTS	Full Military
Vibration	-	5-20Hz @ 1mm displacement	3-33Hz @ 0.125mm displacement
Shock (@60Kgs balanced payload in az. & el.)	3g	6g 25ms @ ½ sinewave pulse vertical	30g 25ms @ ½ sinewave pulse horizontal & vertical
Low Temperature	0°C	-10°C (with heaters)	-30°C (with heaters)
High Temperature	+50°C	+55°C	+70°C
Solar Radiation	-	1120W/m2	
Humidity	80% RH	100% RH	
Icing	Frost covering only	3mm thickness (operational only)	6mm thickness (all conditions)
EMC	CE	Mil Std 461C(RE02, CE03, RS03)	



Chess Dynamics designs and manufactures:

- Security and Surveillance Systems
- COTS, Military Systems
- Single & Multi-Axis Platforms & Directors
- Motion Stabilisation
- Tracking / Positioning
- Satellite Communications / Telecoms
- Optical / Vision Systems

Chess Dynamics prides itself on developing specialist electro-mechanical servo equipment and associated sensors to the highest standards using modern technology.

Why not let Chess Dynamics help you develop high performance systems that meet the stringent demands and specifications that are required in today's competitive international environment ?

For additional information or questions, please do not hesitate to contact us at the address below or visit our website.

