



The CMAS-30D is designed as a multipurpose hull mounted sonar for shallow water surveillance applications. The multibeam sonar uses narrow horizontal and vertical receiving beams as well as high-speed scanning and digital processing techniques to provide instantaneous detection, classification and target data through a full 360° field of view. Sector transmission is operator selectable in 24° sectors for operation in areas such as harbours or narrow channels.

#### **APPLICATIONS**

- Coastal patrol
- Navigation aid / obstacle avoidance
- Mine countermeasures
- Search and recovery of bottom targets
- ROV/AUV tracking
- General surveillance

## CMAS-30D Omni Sonar® Specifications

<b>Modes of Operation</b>	OMNI® ACTIVE
	OMNI® PASSIVE
	SURVEILLANCE
	MCM Mine Counter Measures (Enhanced Mine Detection)
	BTR (Bearing Time Record, up to 35 minutes of history)
	PPI or B-Scope display format
	OFF Line/ON Line BIT (Built-In Test)
<b>Functions/Features</b>	MCC (Maintain Close Contact)
	Directional Transmission (Sec-tored, Manual, and Steered)
	CW or FM Transmission
	Target and Ship's Track His-tory
	Target Audible Alarm Feature
	Electronic Receive Beam Stabilization
	Save/Restore Parameters and Modes
	ZOOM Feature (MCM operat-ing mode)
	Pattern Recognition Mode
Sonar Video Record/Playback	
<b>Electronic Tilt</b>	+8° to -24°
<b>Audio</b>	True (Beamformed), Trainable, Analog, 800 Hz
	(Available in all modes except MCM)

<b>Receive Operator Control Parameters</b>	Clutter Threshold
	Gain (Time Varying Gain (TVG), TVG Master gain, TVG Slope, TVG Level)
	AGC (Automatic Gain Control)
	Noise reduction & smoothing
	Sound Velocity
<b>Display</b>	Color-encoded analog repre-sentation of echo strength
	1280 x 1024 pixel resolution
	True North or Ship's Heading up
<b>Operating Frequency</b>	Color or gray scale (amber/ green)
	CW Mode: 36 kHz or 39 kHz (operator selectable) FM Chirp: 1 kHz centered at 36 kHz or 39 kHz
<b>Automatic Target Tracking</b>	Yes
<b>Beam Width (Vertical x Horizontal)</b>	6° x 6° (Horizontal selectable between 3° to 6°)
<b>Source Level</b>	221 dB (re 1µ Pa at 1 m)
<b>Output Power</b>	13.5 kW (selectable)
<b>Range Resolution</b>	1 m / 0.25 m in MCM
<b>Target Bearing Positioning Accuracy</b>	0.75°
<b>Interface IN/OUT</b>	NMEA-0183
	(IN) Compass GYRO, Roll and Pitch, Depth Sounder, GPS, Speed Log
	(OUT) Tracker Message and Target Data Message
	Note: Interface IN/OUT tailored to customer require-ments