

# RADA USA

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# Who is RADA USA?



- Designs and manufactures All-Threat radars supporting the Warfighter.
- Pulse-Doppler, multi-mission, AESA (phased array antenna) technologies provide advanced capability in a tactical radar.
- USA Subsidiary of Israeli RADA Electronic Industries that was founded in 1970. RADA Electronics Industries has traded on NASDAQ since 1985.
- Established in December 2017
- Foreign Ownership, Control, or Influence (FOCI) mitigated to operate under an SSA (special security agreement) – complete transition of technology to US








- advanced Compact Hemispheric Radar (aCHR<sup>®</sup>)
- enhanced Compact Hemispheric Radar (eCHR<sup>®</sup>)
- Multi-Mission Hemispheric Radar (MHR<sup>®</sup>)
- Improved & Enhanced Multi-Mission Hemispheric Radar (ieMHR<sup>®</sup>)
- extended Multi-Mission Hemispheric Radar (xMHR<sup>®</sup>)



- Active Electronically Scanned Array (AESA) antenna, GaN amplifiers
- Software-defined, digital, with adaptive beam forming
- Hemispheric search and track when four radars are employed as a system
- Extremely fast volume coverage
- Wide range of threat velocities
- Standard and common interfaces
- Electronic Counter Countermeasures (ECCM)

- Combat proven, TRL-9, at the heart of mobile SHORAD/C-UAS operational systems
- Superior performance against low signature targets (RCS, Velocity, Altitude)
- Multi-Mission – “one radar does it all”
- Automated operation through advanced signal processing and algorithms
- Complete Dynamic Air Situational Picture (ASP) while mounted on a tactical vehicle or vessel
- Handles hundreds of targets through Track While Search (TWS) and Revisit modes
- In-depth analysis of Doppler and other target features – 4D
- SWaP-C superiority, unprecedented affordability

# Specifications

RADA Multi-Mission Software-Defined AESA Radar Product Family	aCHR 	eCHR 	MHR 	ieMHR 	exMHR 	nMHR 
Mission	APS, C-UAS	C-UAS, C-RAM, VSHORAD	C-UAS, C-RAM, SHORAD	C-UAS, C-RAM, SHORAD	Fire Control, C-UAS, C-RAM, SHORAD	Fire Control, C-UAS, C-RAM, SHORAD
Frequency	S-Band					X-Band
Spatial Coverage	Radar: 90° Az, 90° El; Four radars installation: Full hemisphere					
Interface Protocols	MAPS, FAAD, ASTERIX, Customer Tailored		MAPS, FAAD, MEDUSA, ASTERIX, Customer Tailored			
Operation Temperatures	-40° - +55° C					
Input Power	28 V (per MIL-STD-1275E)/110/220 VAC					
Size	H: 11.6 in; W: 18.3 in; Depth: 7.4 in	H: 13,3 in; W: 21.1 in; Depth: 8.6 in	Diameter: 19.7 in; Depth: 7.9 in	Diameter: 31.3 in; Depth: 9.1 in	H: 39.4 in; W: 39.4 in; Depth: 11.8 in	H: 24.8 in; W: 18.1 in; Depth: 5.9 in
Weight	75 lbs.	53 lbs.	64 lbs.	128 lbs.	243 lbs.	88 lbs.

# Maximum Detection Ranges

	<i>aCHR</i>	<i>eCHR</i>	<i>MHR</i>	<i>ieMHR</i>	<i>xMHR</i>
<b>THREAT</b>	<b>RANGE (Km)</b>				
<i>Direct - Attack Rocket Missile</i>	4			14	24
<i>Nano UAV</i>	3		5	10	18
<i>Medium - Size UAV</i>	15		25	45	80
<i>Heavy Transport Aircraft</i>			60	165	200
<i>Fighter</i>	22		35	65	110
<i>Fighter - Low RCS</i>			20	35	60
<i>Utility Helicopter</i>	15		25	45	80
<i>Light / Medium Mortar / Short Range Rocket</i>			5	10	18
<i>Heavy Mortar</i>			6	12	20
<i>Soldiers / Pedestrians</i>	7		10	20	
<i>Vehicles / Medium Size Vessel</i>	15		25	45	80
<i>Large Vessel</i>			40	80	130



- U.S. Army



- U.S. Navy



- U.S. Marine Corps



- U.S. Special Operations Command



- U.S. Air Force



- U.S. Coast Guard





# Current Programs

**RADA** USA



## COUNTER UNMANNED AERIAL SYSTEM (C-UAS)

- *USMC PEO LS, PM GBAD*  
– *MADIS / LMADIS*



**MHR /ieMHR**  
(Multi-Mission Hemispheric Radar)



## ACTIVE PROTECTION SYSTEM (APS)

- *Iron First (APS) for M2 Bradley*



**CHR (Compact Hemispheric Radar)**

## US Army – PEO Missiles and Space – PM SHIELD - SHORT-RANGE AIR DEFENSE (SHORAD)

- SHORAD mission: dedicated air defense artillery (ADA) and non-dedicated air defense capabilities that enable movement and maneuver by destroying, neutralizing or deterring low altitude air threats to defend critical fixed and semi-fixed assets and maneuver forces.
- Current US Army Directed Requirement for an Initial Maneuver Short-Range Air Defense (IM-SHORAD) addresses the urgent need to support Operation Atlantic Resolve to provide air and missile defense protection of Stryker and Armored Brigade Combat Teams.
- The RADA radar is the prime sensor to detect and track air threats (traditional and unmanned) and capability to engage a range of ground targets



**Multi-Mission  
Hemispheric Radar (MHR)**

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## WE MAKE SENSE

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