

# AN/MPQ-64 SENTINEL

Integrated battlefield  
management for  
tactical forward  
air defense

EXTENDED AIR DEFENSE  
MISSIONS

AIR COMMAND AND  
CONTROL MISSIONS

BATTLEFIELD  
SURVEILLANCE  
AND COORDINATION  
MISSIONS

COMBINED  
COMMAND AND  
CONTROL MISSIONS



  
**ThalesRaytheonSystems**

# AN/MPQ-64 SENTINEL

## Description:

### The U.S. Army's Next Generation Tactical Air Defense Sensor

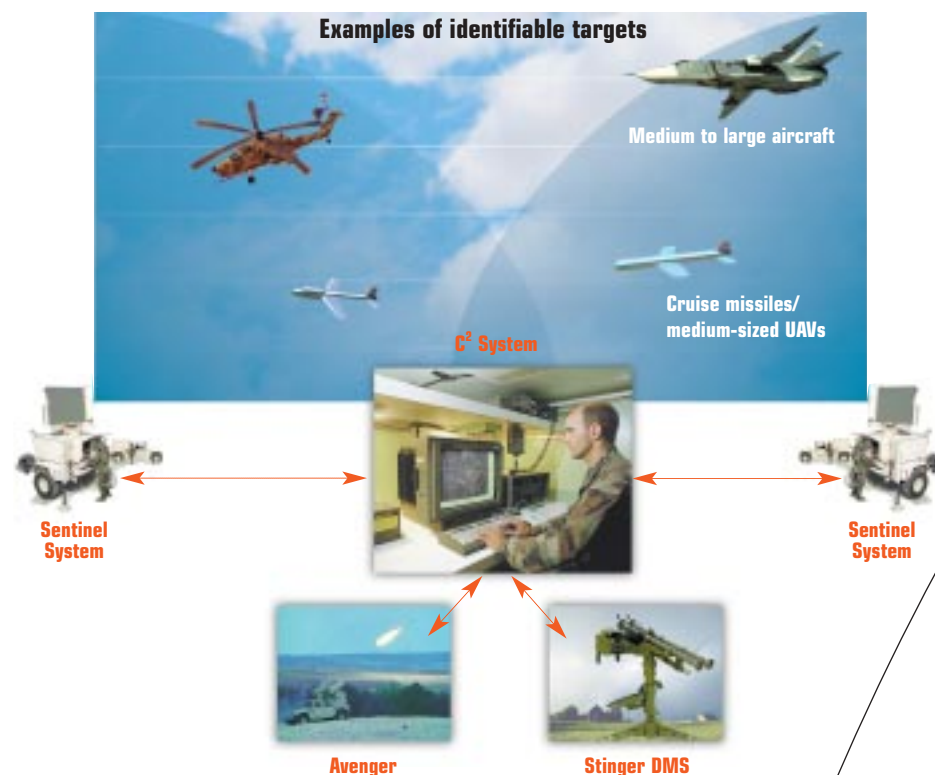
The AN/MPQ-64 Sentinel is a three-dimensional, phased-array system that operates in the X-band to automatically detect, track, identify, classify, and report airborne threats, including helicopters, high-speed attack aircraft, cruise missiles, and unmanned aerial vehicles. This surveillance radar detects and tracks threat aircraft at several times the range of short-range weapons, providing early warning to ground crews and supporting maximum-range engagement of threats. Worldwide requirements for the Sentinel are in excess of 200 systems, with more than 100 delivered or in production. A preplanned product improvement program is underway which provides an 80% increase in radar detection range.

### Integrated Battlefield Management

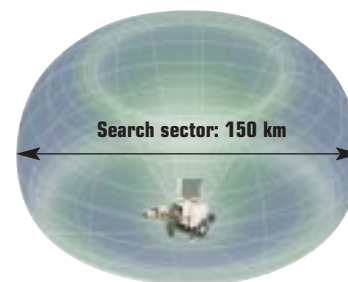
Sentinel command posts activate weapon control orders and provide target-weapon pairing. The Sentinel configuration also allows weapons, radars, and command posts to operate from widely dispersed battlefield positions. Sentinel provides alerting and cueing of targets to a variety of weapons, including Hawk, Surface Launched AMRAAM, Stinger, antiaircraft guns, and other SHORAD/VSORAD-class weapons.

### Troop Protection

Accurate and quick reacting, Sentinel acquires targets far enough from friendly forces to allow sufficient reaction time for their air defense weapons to engage the targets at optimal range. The system also includes an integrated identification friend or foe (IFF) capability that helps prevent fratricide.



AN/MPQ-64 Sentinel	
Specifications	Battlefield Management
<b>Radar Type</b> X-band 3-dimensional pencil beam Range-gated pulse Doppler Phase and frequency scanning 30 rpm with electronic back-scan	<b>Alerting</b> ( <i>time to prepare to engage</i> ) <b>Cueing</b> ( <i>automatic weapon pointing</i> )
<b>Secondary Radar</b> AN/TPX-56 IFF	<b>Battle management functions</b> Aircraft identification Air picture recognition Airspace management Fratricide warning and management Recording of scenarios and battles Rules of engagement Situational awareness
<b>Track Selector</b> Elevation: -10° to +55° Azimuth: 360°	Target-weapon pairing Track correlation Weapon control orders
<b>Range</b> Up to 75 km	
<b>Surveillance Sector</b> Elevation: 22°, selectable within -10° to +55° Adjustable horizon mask from digital terrain data base Azimuth: 360°	



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