

# **CIRCM**

## 5th Generation IRCM Technology for Unparalleled Warfighter Protection

Our Common Infrared Countermeasures (CIRCM) solution is a lightweight, highly reliable infrared countermeasure system that is compatible with rotary wing, tiltrotor and small fixed wing aircraft. Within two years of commencing full-rate production, CIRCM has delivered its 500th shipset and achieved over 30,000 operational flight hours across the AH-64, CH-47 and UH-60.

CIRCM utilizes the most advanced laser and pointing technology to protect warfighters against advanced infrared missiles – thus enabling mission success. This affordable solution interfaces with existing aircraft survivability equipment and uses open architecture to support future growth.

#### THE LOW-RISK APPROACH TO HIGH-LEVEL PROTECTION

The system architecture is designed to defeat modern infrared anti-aircraft missiles while conforming to the challenging size, weight, and power restrictions of smaller airframes.

#### **BENEFITS, LISTED BY FEATURE**

#### Pointer/Tracker

- Low cost
- · High reliability
- Lightweight and suitable for light helicopters
- Minimal air-stream intrusion
- Modular design
- Configured for capability enhancements and spiral upgrades

### **Quantum Cascade Laser**

- Fast, simultaneous break-lock jamming
- Power to defeat future threats
- Reliable solid-state sources
- All-weather, all-altitude operation
- Field replaceable
- · Dual production facilities



# MOST EXPERIENCED TEAM IN LASER IRCM

Northrop Grumman is a leading innovator in laser directional infrared countermeasures (DIRCM). We have installed systems on more than 1,500 aircraft of 80 types, including CV-22, CH/MH-53, CH-46 and a host of additional rotary and fixed wing types. We've been protecting warfighters against infrared threats for more than 50 years, with a track record of innovation, investment and over a million operational flight hours.

Our team has led the way with core IRCM technologies, including:

- Multiband laser
- Continuous laser automatic boresighting
- QCL laser technology
- Battle-ready track algorithms
- High resolution camera
- Multi-pointer jamming synchronization

With our CIRCM solution, high-level protection comes with low risk.





Northrop Grumman has yielded five generations of IRCM protection from the initial UK MoD lamp-based system to today's Common Infrared Countermeasures (CIRCM) system.

### A DESIGN THAT'S LIGHTWEIGHT, COMPACT AND EFFICIENT

		System Processor Unit	Pointer/Tracker	Laser
Physical	Length	6.9 in.	17 in.	10.3 in.
	Width	5.3 in.	7.5 in.	7.9 in.
	Height	8.0 in.	12.31 in.	2.7 in.
	Weight	~10.0 lbs.	~26.5 lbs.	~9.8 lbs.
Electrical	DC	+28V	+28V	+28V
	Power	35W nominal, 45W max	90W nominal, 250W max	200W nominal, 250W peak



