

Python-5™

Full-Sphere Imaging Infra-Red (IIR) Missile for Air-to-Air or Air Defense Missions

The Python-5™ is a fifth-generation air-to-air missile providing the pilot engaging an enemy aircraft with a revolutionary full-sphere launch capability. The missile can be launched from very short range to Beyond Visual Range (BVR) with exceptional kill probability and excellent resistance to countermeasures, irrespective of evasive target maneuvers.

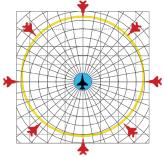
The Python-5's unique full-sphere performance is achieved by a combination of high agility, Lock- On-After-Launch (LOAL) capability, and excellent acquisition and tracking capabilities. Its dualwaveband Focal Plane Array (FPA) seeker and sophisticated algorithms enable acquisition of even small, low-signature targets in look-down, adverse background, and cloudy environments.

The Python-5 is operational and combat-proven in 5 countries worldwide. Hundreds have been produced by RAFAEL's active production line.

Benefits

- Effective performance for very short-range to near Beyond Visual Range (BVR) intercepts
- High probability of kill in various encounter conditions
- High resistance to countermeasures
- Adaptable to a wide range of aircraft
- Dual-use missile (air-to-air and air defense)
- Cost-effective
- Dual-band imaging seeker (IR+CCD)
- LOAL, with Uplink target data





Full-Sphere Launch Envelope

Innovative Interceptor for Air Defense Missions

The Python-5, in conjunction with the DerbyTM BVR Family of missiles, is used as an interceptor in the SPYDERTM short- and medium-range air defense systems.

Both SPYDER systems are designed to engage and destroy a wide spectrum of threats including aircraft, helicopters, cruise missiles, UAVs, UCAVs, and stand-off weapons.

Advanced Technologies

Python-5 combines multiple innovative technologies. The missile incorporates a new dual-waveband Imaging Infra-Red (IIR) seeker, advanced computer architecture, Inertial Navigation System (INS) based on FOG technology, Infrared Counter-Counter-Measures (IRCCM), and sophisticated flight control algorithms.

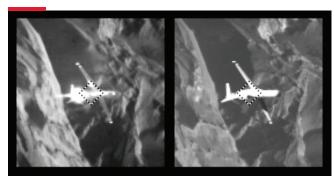


Features

- Full-sphere launch envelope from very short to Beyond Visual Range
- Target lock-on before and after launch (LOBL & LOAL modes)
- Acquisition of small, low-signature targets in look-down, adverse background, and cloudy environments
- Fifth-generation imaging seeker with extremely high off-boresight capability

Technical Specifications

Weight	231.5 lb	105 kg	
Length	122 in	310 cm	
Wingspan	25.2 in	64 cm	
Diameter	6 in	16 cm	



IIR CCD



AIR & MISSILE DEFENSE SYSTEMS DIVISION

Tel: +(972)73-336-7990 Fax: +(972)73-336-7989 Email: rafael_ads@rafael.co.il **HQ Tel:** +(972)73-335-4714 **Fax:** +(972)73-335-4657

Email: Intl-mkt@rafael.co.il

www.rafael.co.il