

Python-5™

Full Sphere IR Air-to-Air or Surface-to-Air Missile



Achieve a decisive advantage in air-to-air or air defense missions

Benefits

- Effective performance for very short range and near beyond visual range 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 surface-to-air)

Full Sphere IR Missile for Air-to-Air Missions

The Python-5 is the newest member of the Python family. This fifth generation air-to-air missile provides the pilot engaging an enemy aircraft with a revolutionary full sphere launch capability. The missile can be launched from very short to beyond-visual ranges with greater kill probability, excellent resistance to countermeasures, irrespective of evasive target manoeuvres or deployment of countermeasures.

The Python-5's unique full sphere performance is achieved by a combination of Lock On-After-Launch (LOAL) and excellent acquisition and tracking capabilities. Its dual waveband Focal Plane Array (FPA) seeker and sophisticated algorithms enable acquisition of even small,

low signature targets in look-down, adverse background and cloudy environments.

Successful developmental and operational testing of the Python-5 missile has already been carried out, including extensive captive carry evaluation and homing tests. Python-5 has demonstrated outstanding target detection and tracking.

Innovative Interceptor for Air Defense Missions

The Python-5 complemented with the Derby BVR missile is used as an interceptor in the Spyder short and medium range air defense systems. Both Spyder systems are designed to engage and destroy a wide spectrum of threats, such as attack aircraft, bombers, cruise missiles, UAVs and UCAVs and stand-off weapons.

Features

- Full sphere launch envelope from very short to beyond visual ranges
- Target Lock-On-Before and After Launch capability (LOBL & LOAL Modes)
- Acquisition of even small, low signature targets in look-down, adverse background and cloudy environments
- Fifth-generation imaging seeker with extremely high off-boresight capability



Python-5 Seeker Imagery



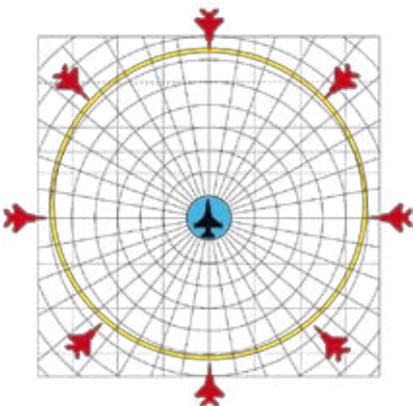
Technical Specifications

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

Technological Advancement

Python-5 combines advanced innovative technologies with operationally proven Python-4 components.

The missile incorporates a new dual waveband imaging seeker, advanced computer architecture, Inertial Navigation System (INS), sophisticated Infrared Counter-Counter-Measures (IRCCM) and sophisticated flight control algorithms. Python-5 maintains Python-4's unique aerodynamic airframe, INS, powerful rocket motor, warhead and proximity fuze.



Full Sphere Launch Envelope



Spyder ADS



Missiles and NCW Division

Tel: (972)4-990-8503 Fax: (972)4-990-6257

E-mail: missile_mkt@rafael.co.il

HQ Tel: (972)4-879-4714 Fax: (972)4-879-4657

E-mail: intl-mkt@rafael.co.il www.rafael.co.il