



PPR

Persistent Perimeter Protection
Radar Network
ELM-2114





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The Persistent Perimeter Protection Radar-PPR (ELM-2114) is a family of high resolution, all weather lightweight radars featuring simultaneous multi-beam technology. PPR is available in two configurations: V05 for shorter ranges and V1 suitable for longer range requirements. The radar provides early warning around sensitive facilities such as military bases, airports, prisons and other critical infrastructures. Multiple beams give the radars high resolution in azimuth, and perform simultaneous search, detection and tracking of targets over an entire region of interest. PPR operates with a stationary (non-rotating) solid state planar array covering a sector of 90°. The radars are installed around the perimeter of a facility and can be affixed on a fence, wall or post. All the radars are connected (Power over Ethernet – PoE) to the Command & Control center hosting the surveillance software providing a complete situational awareness picture.

Features

- Multi-beam linear frequency modulation continuous wave (LFMCW) radar operating in a civilian non licensed ISM K-band.
- Low false alarm rate.
- High probability of detection and interception of targets even in rigorous weather conditions.
- High accuracy, automatic and continuous multi-target detection and tracking.
- Simple deployment and operation.
- Interoperability with electro-optic sensors and Command & Control systems.
- Command & Control application providing a tactical picture of the radar and camera network.

Technical Specification

Description	ELM-2114/ PPR	
	V05	V1
Detection Range		
Crawling Human (RCS 0.2 m ²)	250 m	500 m
Human (RCS 0.5-1 m ²)	500 m	1,000 m
Vehicle (RCS 10 m ²)	1,000 m	2,000 m
Minimum Radial Velocity	0.3m/sec	0.3 m/sec
Size (WxHxD)	17 x 13 x 5 cm	26 x 14 x 9 cm
Weight	1 Kg	2.5 Kg
Power Consumption (48v DC)	15 W	20 W
Environmental Temperature	-20° - +50° c	
Certification	CE & FCC	
Communication & Power	Ethernet cable with POE	
Range Accuracy	0.5 m	
Azimuth Coverage	90°	
Azimuth Accuracy	1°	
Elevation Coverage	12°	
Frequency Band ISM	24GHz	

