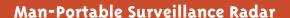
# THALES

**SQUIRE** is a man-portable surveillance radar equipment and is suited for battlefield, border, coast and site surveillance applications.

**SQUIRE** is a Low Probability of Intercept FMCW radar using very low transmit power (1 Watt maximum).

The system is suitable for network operation. **SQUIRE** may also be used for assisting in counter-drug and anti-smuggling operations, force protection and control of border intrusion.



# **SQUIRE**





## **SQUIRE**

## **Man-Portable Surveillance Radar**

#### **KEY BENEFITS**

- SQUIRE is a man-portable ground surveillance radar for detection/tracking and classification of moving ground targets. It can assist artillery and mortar firing units by giving feedback on shell impacts.
- Deployment of troops under all circumstances demands a system that is easily transportable, not only by vehicles, but also by man. SQUIRE is a lightweight radar being man-portable and easy to install on a vehicle.
- The FMCW radar techniques applied in SQUIRE allow very low transmit power which makes the system virtually undetectable. Even sophisticated devices will not detect SQUIRE. This gives a clear tactical advantage.
- Low level air surveillance for detection of slow moving aircraft/UAV (< 300 km/h)</li>
- Advanced doppler processing
- The use of reliable components like the solid state transceiver, results in an extremely high Mean Time Between Failure [MTBF > 20.000 hr].
- This, combined with extensive use of "Commercial of the Shelf" components, ensures that the Life Cycle Cost of SQUIRE are extremely low.



### **FEATURES**

- Very Low Probability of Intercept (LPI)
- Instrumented range selection:
   3 km, 6 km, 12 km, 24 km and 48 km
- Track While Scan (option)
- Automatic and manual target classification
- Artillery fire deviation measurement
- Threat warning via alarm zones
- Day and night, all weather capability
- Very safe due to low output power
- Ease of operation (one man operation) with user friendly man-machine interface
- Extremely low weight (man portable)
- Fast deployment and march-order
- Separation of radar unit and operator unit up to 100 m with cable TCP/IP network operation
- High operational availability
- Very low life cycle costs
- Suitable for mounting on a vehicle or a mast
- Sea mode (sea clutter filtering)

### **KEY PARAMETERS**

Typical Detection Ranges

 Pedestrian (0,5 m²)
 9 km

 Vehicle (10 m²)
 19 km

 Tank (20 m²)
 23 km

 Transmit Power
 1 W max.

Accurancy

 $\begin{array}{ll} \mbox{Azimuth} & \leq 5 \mbox{ mils} \\ \mbox{Range (at 3 km range setting)} & \leq 5 \mbox{ m} \\ \end{array}$ 

I-J Band Frequency Modulated

Continous Wave Doppler Radar

Weight

Radar Sensor 18 kg Operator Unit 4 kg

System Power Input (at 24V DC) Typical 80 W