

Blighter[®] MultiWatch



Blighter Radars (with high-gain directional wireless LAN antennas)

- Persistent wide area surveillance system
- Lightweight and battery powered with rapid set-up allowing easy mobile deployment
- From 2 to 6 radars per MultiWatch system
- Simultaneous 1 second Vortex Fast-Scan for optimum situational awareness
- Non-mechanical e-scan radars for reliability
- Self-forming and self-healing wireless network
- Applications include:
 - Camp security
 - Critical infrastructure protection
 - National border security

Blighter MultiWatch comprises a wireless-networked group of lightweight electronic-scanning (e-scan) Ground Surveillance Radars (GSRs) that provide persistent surveillance over a wide area. The sensor system can be used in most terrain types, including complex rocky or mountainous terrain, as well as areas of flat or dune-covered desert. Blighter MultiWatch provides a cost-effective solution for both force protection of temporary camps and detection of cross-border infiltration by terrorists, smugglers or illegal immigrants.

Blighter MultiWatch is a compact and lightweight sensor system which can be rapidly set-up from backpacks. All system components are fully man-portable and can be easily stowed onboard vehicles.

The radar sensors can be deployed over an area of several square kilometres, allowing each radar to optimally observe its 90° sector. The radars are connected back to the BlighterView HMI control station over a self-forming (and self-healing) mesh network of wireless repeater nodes.

Camp Security & Key Asset Protection

Security of key assets or temporary camps can be achieved by deploying the MultiWatch radars in a circular configuration, thus providing wide-area surveillance around a camp or site of critical infrastructure. In order to maximise sensor performance, individual radars may be remotely positioned on elevated points of the local terrain. Where it is necessary to deploy the radars beyond the normal operating range of their built-in wireless networking capability, additional wireless repeater nodes can be set-up at convenient half-

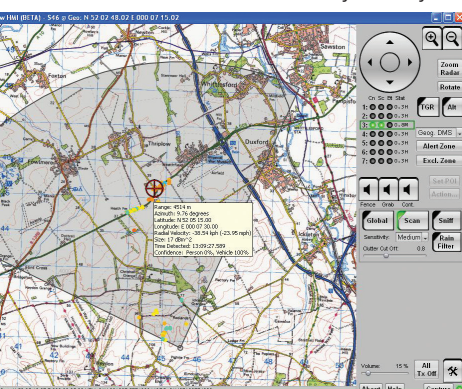
way points to ensure wireless connectivity back to the control station. Areas of overlapping radar coverage can be deliberately configured in order to provide intensive surveillance of known or suspected problem areas.

Frontier Security

Blighter MultiWatch systems may also be configured as a line of sensors to provide a very effective 'virtual



fence' at otherwise porous sections of a national border or along a line of control. Where a troublesome area has been identified, the MultiWatch system can be temporarily (or semi-permanently) deployed to reliably detect the smuggling of goods and/or people, as well as monitoring for the activities of insurgents. After a



BlighterView HMI Control Station

period of a time (i.e. once the smuggling or insurgent activities have been suppressed), the system can be easily transported and deployed for the surveillance of the next problem area.

Continuous Persistent Surveillance

Each Blighter radar uses its 'Vortex Fast-Scan' technology to scan a 90° sector (of up to 50 km²) in less than one second. A single MultiWatch system comprises from two to six radars that scan concurrently to provide continuous, persistent surveillance over large areas up to 300 km².

All movements of humans and vehicles are immediately reported, allowing even brief glimpses of intruders to be detected. In order to achieve optimum coverage and performance, the radars may be deployed on high ground using the supplied lightweight tripods or mounted on optional telescopic pump-up masts, fitted to land vehicles.

The MultiWatch e-scan radars and wireless repeater nodes are very power efficient and hence may be powered by means of lightweight portable batteries.

The batteries can be recharged from a vehicle or optionally via alternative power sources such as solar power.

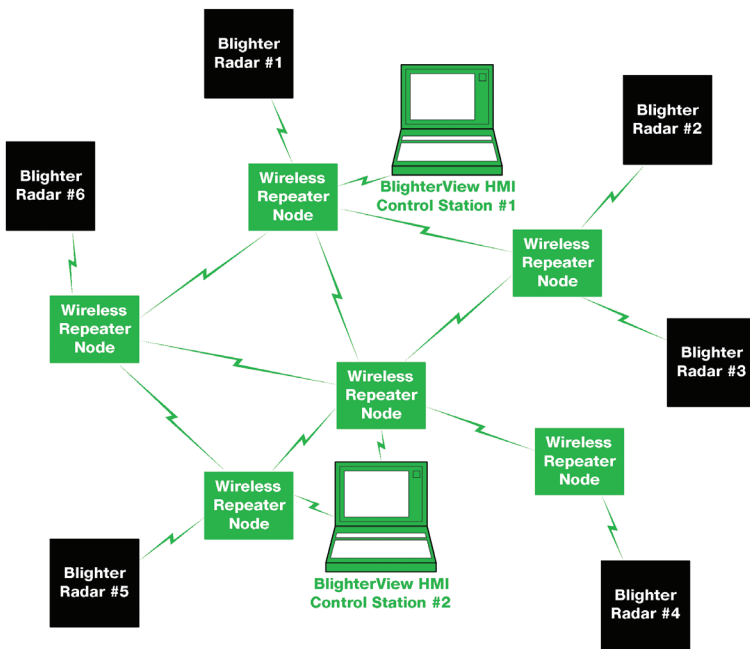
BlighterView HMI Control Station

MultiWatch systems are configured and monitored through the BlighterView HMI control station software, which is typically hosted on a single ruggedised Windows laptop PC. Optional 'monitor-only' stations may also be configured and it is also possible to segment MultiWatch systems into two parts, where each part has its own dedicated control station.

The BlighterView HMI allows radars to be displayed either simultaneously (to provide a complete overview picture) or individually for more detailed localised analysis. A built-in automatic map server selects the appropriate background map so that each radar's GPS and electronic compass can automatically geo-locate its sector of surveillance onto the map.



Wireless Repeater Node



Blighter MultiWatch 6 System

Standard Configurations

Blighter MultiWatch is available in one of three standard configurations: 'MultiWatch 2', 'MultiWatch 4' and 'MultiWatch 6'. Each standard configuration comprises various combinations of radars, repeaters and control stations. These are summarised in the table below:

	<i>Blighter B202 Mk 2 Radars</i>	<i>Wireless Repeater Nodes</i>	<i>BlighterView HMI Control Stations</i>
MultiWatch 2	2	2	1
MultiWatch 4	4	4	2
MultiWatch 6	6	6	2

Errors and omissions excepted. Plextek reserves the right to modify specifications without notice. Blighter radars are protected by a number of international patents. The Blighter name is an international registered trademark.

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