

Introducing MS⁴

A ruggedised, integrated, 'Everything-over-IP'
Computer & Communications solution



A development of AUSortium partners:

MICROSECURE
CORPORATION



'Stealthy', rugged, scalable and highly portable, MS⁴ is a computer-based ISR platform that delivers high speed, IP-based, 'anywhere-anytime' connectivity to users in the field. Get BIG bandwidth AND features in a compact and very cost effective solution, that'll break down communications barriers without breaking the bank!

What is MS⁴?

Based on Opentec's battlefield-proven range of rugged portable computers, MS⁴ is an embedded 'Computer and Communications' platform that delivers an 'Everything-over-IP' capability into a wide range of applications.

At its simplest, it's a portable, wireless, networked computer solution that delivers office-grade functionality into the field in a form factor that is fully ruggedised, compact and integrated. At its most complex, it can be everything from a secure Tactical Data Link for controlling battlefield operations, a stealthed communications system for covert operatives on (or beyond) the front line, or an ad hoc network solution for an emergency response event.

While most of the features of MS⁴ can be found in other solutions, what makes MS⁴ unique is that it brings everything together into a simple, embedded platform that's easy to deploy, easy to use, scalable and upgradable.

If that weren't enough, it integrates with a range of other C4/MISTAR (our range of integrated, embedded, computer-based Medical, Intelligence, Surveillance, Target Acquisition, and Reconnaissance) products to deliver an amazing array of portable, deployable solutions for a wide range of defence, security and field medical applications.

And because it's a COTS/MOTS solution, it can be deployed today, expanded tomorrow, and upgraded next year as new capabilities and features are delivered.

In short, it's not an 'interim capability system' or 'future war fighting' platform, but a genuinely feature-rich 'deliverable now' system that will deliver and extend capability.

Principal features:

- it's an 'infrastructure-less' platform that includes all the elements required to create mobile or semi-permanent LANs/WANs
- it's compact enough to be mounted on most vehicles, or be man-packable
- it's Multi-Mbps broadband capable, making it suitable for any voice, data or video application
- it features embedded encryption for both data storage and transmission, up to defence 'Type 1' levels
- it's compact, modular, scalable and upgradable
- it doesn't require high levels of training to operate
- is Australian developed and supported

MS⁴ results from a cooperative partnership between AUSortium teaming members MicroSecure Corporation and Opentec Solutions, both Australian owned and operated SMEs. It's based on proven, deployed technologies, and delivers an open platform that ensures optimal performance, maximum flexibility and adaptability, and far greater returns on investment.

Target customers

MS⁴ systems include:

- all computer and network hardware (COTS/MOTS and custom)
- all network and management software

It's therefore ideal for:

- border patrols (fixed, re-locatable or mobile)
- terrestrial security and surveillance, whether overt or covert
- secure enough for communications right out to the 'last kilometre' of the battlefield
- anywhere 'stealthed' communications are required

- anywhere high (multi-megabit) bandwidth is needed
- any input, whether audio, video, data
- command and control environments

More specifically, MS⁴ delivers the secure IP networking requirements of:

- State & Commonwealth security and emergency services groups
- Commonwealth and Coalition defence forces
- CCEB (Combined Communications Electronic Board, ie Canada, Australia, US, NZ & UK) defence forces
- NATO forces

Applications

While it's primarily a terrestrial communications platform, and uses high level encryption suitable for Type 1 data transmission, it can easily include satellite elements, using any available commercial or defence satellite network. And because even the satellite uplink systems used are compact and rugged, it's a genuinely go-anywhere-anytime solution.

Better still, because it's an open IP platform, it can be easily integrated with IP cameras, sensors, or COTS/MOTS software applications.

MS⁴ delivers secure, portable network solutions for:

(a) Overt/Covert Surveillance/ Communications

- sniper/interdiction operations¹
- perimeter security²
- border patrols^{1 2}
- pipeline security²
- armoured rooms / observation posts³

(b) Mobile Work Groups

- work camps (oil & gas, power, water, telecoms)
- army camps

(c) Command & Control

- Joint Operations Command (JOC)
- Holding Area or Mobile HQs
- Police Forward Command Posts (PFPs)
- Embassy In A Box^{1 2 3}
- Emergency Services / Disaster Recovery^{1 2}

1. Man-packable

2. Vehicle Mounted

3. Deployable/Relocatable

1



Ad Hoc Networking (Peer to Peer LANs)

- Comms on the Move (COTM) and Comms on the Pause (COTP)
- Smaller work groups comprising stationery, mobile or deployable/relocatable nodes.
- Comprised of small form factor, highly portable node elements.
- Typical number of users: <2-25 nodes

Options:

- Security (COMSEC, TRANSEC)
- Bandwidth (1-100Mbps)
- Scalability (Trisectors/Triplexors)

2



Infrastructure Inter-Networking (LANs & WANs)

- Larger scale networks comprising fixed (permanent or semi-permanent) and mobile (ad hoc) network enabled devices
- Comprised of small form factor, highly portable node elements, integrated with larger network elements for greater WAN coverage.
- Typical number of users: >20 – several hundred

3



Global Wide Area Networking (GWAN)

- Larger scale networks comprising fixed (permanent or semi-permanent) and mobile (ad hoc) network enabled devices in widely separated geographies.
- Typical numbers of users: NA; more about distance between nodes than numbers of nodes

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