

Defence Considerations

Tim Winter, Managing Director,
Global Service Provider Group

Defence Leadership



- ★ 41% of GLOBAL MILITARY MARKET
- ★ 18 of 28 EU MEMBER STATES
- ★ 16 of 29 NATO MEMBER STATES
- ★ U.S. DEPARTMENT OF DEFENSE

The Connected Military



iDirect Defense and Government solutions ensure troops have the critical connectivity and lines of communication for mission success



Mobility is key: over **60%** of revenue growth will come from UAVs, COTP (Land Mobile) and Maritime (NSR)



8% CAGR through **2026** in UAVs and Manned Air platforms for ISR missions



Terminals deployed by armed forces have risen by a **20% CAGR** of over the past five years, with more than **45,000 terminals** now in service (COMSYS)

Single Platform, Many Missions

Aero ISR / Border Security



Growth Drivers

- ISR Data collection and distribution (20% CAGR)
- Increased number of hot spots
- 24/7 requirements
- Mission creep – border security

Winning Criteria

- Seamless mobility / ABS
- SWAP
- Security (TRANSEC, FIPS 140-3)
- Certification (WGS)
- Dynamic Allocation
- Resiliency

iDirect Enablers

- TRANSEC, FIPS 140-3
- WGS, MIL-STD Support
- 9800 AR AE, Tactical Hub, Defense Line Cards
- ABS, Mobility and Efficiency
- Global NMS

Maritime



Growth Drivers

- Maritime BLOS Communications
- Maritime Border security and ISR collection
- MWR Crew support
- Global deployments

Winning Criteria

- Seamless mobility
- Global Coverage
- Dynamic Allocation
- QoS
- Resiliency

iDirect Enablers

- TRANSEC, FIPS 140-3
- WGS, MIL-STD Support
- 9350
- Defense Line Cards
- ABS, Mobility and Efficiency
- Global NMS

Single Platform, Many Missions

Land Mobile



Growth Drivers

- Digitalization of the battlefield
- Border control
- More affordable terminals
- Always connected soldier
- Proliferation of armored land vehicles

Winning Criteria

- Mobility support/HTS
- Security (TRANSEC, FIPS 140-3)
- Certification (WGS)
- Dynamic Allocation
- AJ / LPI / LPD
- Resiliency/Survivability

iDirect Enablers

- TRANSEC, FIPS 140-3
- WGS, MIL-STD Support
- 9350, 950 MP, Tactical Hub, Defense Line Cards
- ABS, Mobility and Efficiency
- Vehicle Integrator Ecosystem

Land Manpack



Growth Drivers

- The connected soldier
- Small team tactical
- Border security and Intel collection
- MWR Crew support
- Super Regional deployments

Winning Criteria

- SWAP
- Global Coverage
- Dynamic Allocation
- QoS
- AJ / LPI / LPD
- Resiliency

iDirect Enablers

- TRANSEC, FIPS 140-3
- WGS, MIL-STD Support
- 950 MP, Tactical Hub
- Defense Line Cards
- ABS, Mobility and Efficiency
- Terminal Partner Ecosystem

Enabling The Modern Defence Network

1

SECURE & RESILIENT NETWORKS

2

HIGHER EFFICIENCY & PERFORMANCE

3

BROAD DEFENCE PORTFOLIO

4

SEAMLESS MOBILITY EXPERIENCE

1

Secure & Resilient Network



SECURE TERMINAL
AUTHENTICATION
METHODS



ENCRYPTED
MANAGEMENT PLANE



FIPS 140-2 LEVEL 3
TRANSEC



Higher Efficiency & Performance



- Support Larger, More Powerful Satellites
- Carrier Optimization/ Transponder Saturation
- Higher Returns with Adaptive TDMA
- DVB-S2X



- National Waveforms
- Anti-Jam
- High Performance Returns
- Multi-Band, Multi-Orbit
- Terrestrial Integration



Defence-grade terminals



4

Seamless Mobility Experience

iDirect's Advanced Mobility Features Maintain HTS Connectivity
in Multi-Spot Beam Architectures – Enables a true dynamic capability



- Automatic Beam Selection and Switching
- Make-Before-Break
- High Speed COTM
- Persistent Multicast
- Global NMS and Global Bandwidth Management

- Adaptive Coding and Modulation (ACM) and Adaptive TDMA
- Advanced Quality of Service
- Spread Spectrum
- Security, Resiliency

IDIRECT DEFENCE PRODUCT PORTFOLIO

Defence-Grade Products

Hub & Line Cards

Tactical Hub



- Cost-effective, compact, durable
- Compatible with any Defence remote
- FIPS 140-2 Level 3
- MIL-STD 810G
- Ruggedized and Virtualized Environ.

DLC-T, DLC-R



- DLC-T supports DVB-S2/DVB-S2X
- DLC-R demodulates up to 16 channels
- FIPS 140-2 Level 3, **TRANSEC**
- Evolution, Velocity

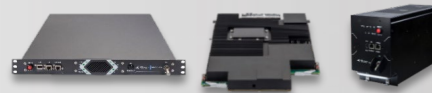
Remote Solutions

9-Series



- Rackmount and board (manpack)
- DVB-S2/ACM w/ ATDMA returns
- 8-port GigE switch (9350)
- 30% reduced SWaP (950mp)
- FIPS 140-2 Level 3, TRANSEC, MIL-STD 810G, WGS
- Evolution, Velocity

9-Series Aero



- Board, rackmount, and ARINC
- Ultra high-speed COTM (over 1,600 km/hr)
- 2nd demodulator for multicast overlay or beam switching
- FIPS 140-2 Level 3, TRANSEC, MIL-STD 810G/DO-160G, WGS
- Evolution, Velocity

Commercial Products

Hub & Line Cards

Universal Hub



- DVB-S2 (up to 45 Msps) and DVB-S2X (up to 119 Msps)
- MODCODs up to 256APSK
- ATDMA up to 29 Msps, up to 16 channel MCD, 16QAM*
- Evolution, Velocity

ULC-T, ULC-R



DVB-S2 / DVB-S2X Remote Solutions

iQ Desktop Series



- Desktop form factor
- DVB-S2/S2X w/ ATDMA returns
- 2 GigE ports
- Evolution, Velocity

iQ 200 Series



- Rackmount, board
- DVB-S2/S2X w/ ATDMA returns
- 2 GigE ports
- Mobility
- Evolution, Velocity

iQ LTE Series



- *Coming soon!*
- Rackmount
- VSAT/4G LTE converged solution for auto switchover
- Cradlepoint IBR Series Router

* Platform and release dependent

Agilis Manpack

Portability and deployment

- Less than 33kg (1.0m) / 39kg (1.2m)
- 2 Backpack packaging
- Fast deployment (less than 8 mins)
- No tools required for assembly / disassembly

Environmental compliance

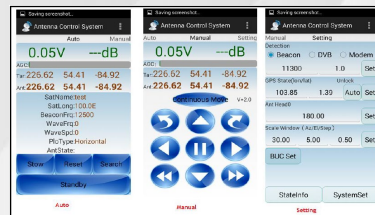
- MIL-STD-810F Compliance for Temperature, Humidity, Precipitation, Vibration

Ease of Operation and Flexibility

- AC or DC powered
- Auto Pointing via Handheld or One Touch Acquisition Button
- DVB / Beacon Receiver Selection



1.0M / 1.2M Ku-Band
Motorized



9050 OM

Enclosure Design

- Ruggedized enclosure with 950mp
- Passively cooled
- LED blackout switch, zeroize button, and antenna pointing meter

Data Interface

- Single data I/O connector to support two LAN ports, console, Tx key line, and GPS input

External Power Supply

- Designed to meet the same protection requirements as the enclosure

Environmentals

- IP67 rating, water resistant
- Meets MIL-STD 810G for altitude, drop, temperature and vibration

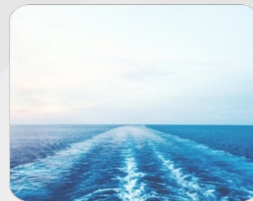


Kymeta™ u7 Terminal

Innovative flat panel terminal solution for seamless, always-connected, mobile communications.

Benefits

- Lightweight, low-profile, and easy to install
- No moving parts for greater reliability
- Flexible installation options
- Broadband connectivity
- Low power consumption
- Secure point-to-point connection



The Right Partner At Your Side

- Broad mobility and defence product and feature set
- More solutions with greater speed and scale
- Early access to tomorrow's superior products and technology
- Collaboration across a comprehensive ecosystem
- New opportunities in high-value emerging markets

REDEFINE
WHAT'S POSSIBLE

QUESTIONS?

Thank You