



**WIN**

## **BOOSTING BROADBAND CONNECTIVITY FOR VEHICLES and VESSELS IN MOTION**

**Up to 100 Mbps  
Up to 250 Km/h**

Public and private organizations require broadband connectivity for vehicles and vessels in motion, essential for onboard video surveillance, internet access, data base access, heavy machinery operations and more.

RADWIN uniquely addresses the needs of the market by offering long range coverage and fiber-like capacity for mobile video and data connectivity at an affordable Total Cost of Ownership (TCO).

RADWIN FiberinMotion™ solution offers powerful, easy to deploy base stations that guarantee high capacity connectivity to ruggedized mobile units mounted on vehicles and vessels in motion.

## FiberinMotion Applications



### Patrol Units & Mobile Command

- Broadband connectivity to transmit real-time video, data and VoIP



### Oil & Gas

- Ship to rig communications
- Data transmission, video conferencing and Internet access to supply and maintenance vessels
- Real-time video transmission to and from rigs and fire & rescue vessels



### Mines

- Automated mining vehicles and machinery
- Monitoring of machinery operators
- Secure mine assets



### Ferries

- Passenger Internet access and data transmission for the crew

### Security Patrol Boats

- Real-time video & data from boats patrolling rivers, bays and canals to the control center



### Airports

- Mobile video and VoIP for security patrol and ARFF vehicles
- Database access for airport operations & maintenance across airfields and airport property



### Ports

- Remote control and monitoring of freight cranes to monitor operations
- Real-time monitoring of port facilities and crane operators



### Border Security

- Real time video transmission from unmanned ground vehicles
- Real time video transmission from border cameras to border patrol

## FiberinMotion Solution Highlights



### HBS – High Capacity Base Station

- Up to 100Mbps
- Simultaneously support of up to 32 HMUs/VMUs/HSUs
- Wide Area Coverage – Up to 10km between base stations
- Guaranteed bandwidth per vehicle or vessel
- Multiband - 4.9 - 6.0 GHz
- MIMO/Diversity Dynamic Selection for maximum capacity and quality
- Secured connectivity – AES128/AES256

### High Capacity Mobile Units

#### Vehicular Mobile Unit (VMU)

- Internal or external installation – suitable for vehicles, trucks, heavy machinery and busses
- Up to 50Mbps
- High speed - 250Km/h
- Integrated Wi-Fi 802.11b/g/n access point
- Integrated GPS for vehicle tracking
- Direct DC power 10V-36V
- IP67
- Simple installation



#### High Capacity Mobile Unit (HMU)

- Pole mount – suitable for vessels (ferries and boats), cranes and mobile command trucks
- Up to 100Mbps
- High speed - 250Km/h
- IP67

## Technical Data

	HBS 5800	HMU 5700	VMU 5750
Type	Base Station	Mobile Unit	Vehicular Mobile Unit
Net Capacity	100 Mbps - Diversity 200 Mbps - MIMO	100 Mbps	50 Mbps
Number of Mobile Units per Base Station	Up to 32 HMUs/VMUs/HSUs	N/A	N/A
Frequency Bands	4.9 - 6.0 GHz	4.9 - 6.0 GHz	4.9 - 6.0 GHz 2.4 GHz (Wi-Fi Access Point)
Range	Up to 10Km (6miles)		
Speed	Up to 250Km/h (155mph)		
OFDM	Supported		
Dynamic MIMO/Diversity	Supported		
Smart Bandwidth Management (SBM)	Supported		
TDD Synchronization	Inter & intra site synchronization (co-existence within RADWIN PtP, PtMP and FiberinMotion)		
Security	SNMPv1, SNMPv3 AES 256 AES 128 FIPS 197	SNMPv1, SNMPv3 AES 256 AES 128 FIPS 197	SNMPv1, SNMPv3 AES 128 FIPS 197
<b>Networking</b>			
Sub Convergence Layer	Layer 2		
QoS	Packet classification to 4 queues according to 802.1P and Diffserv		
VLAN	Supported 802.1Q, 802.1P, QinQ		
<b>Environmental</b>			
Operating Temperatures	-35°C to 60°C / -31°F to 140°F		
Humidity	100% condensing, IP67		

*“For over a year GNIUS has been using FiberinMotion technology and it has proven to be the best mobility solution for transmitting real-time high definition video from multiple cameras onboard the UGVs to the command center. FiberinMotion operates in highly challenging environments and is extremely reliable and robust.”*

Danny Gur, VP Business Development, GNIUS

*“BNC has deployed RADWIN’s FiberinMotion to provide customers with wireless broadband in motion for police vehicles, port machinery and ship to oil rig connectivity. We are happy to say that this solution has successfully and reliably delivered high quality and real-time voice, video and data for vehicles, vessels and heavy machinery on the move. ”*

Erwin Yin, Vice President, BNC, China

### About RADWIN

RADWIN is a leading provider of sub-6 GHz wireless Point-to-Point and Point-to-Multipoint solutions that deliver voice, video and data with unmatched high-capacity for long ranges. Deployed in over 150 countries, RADWIN’s solutions serve the needs of service providers, mobile carriers, governments, enterprises, public and private security companies and transportation organizations. RADWIN’s solutions power applications including backhaul, broadband access, private network connectivity, video surveillance transmission as well as mobile broadband connectivity.

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