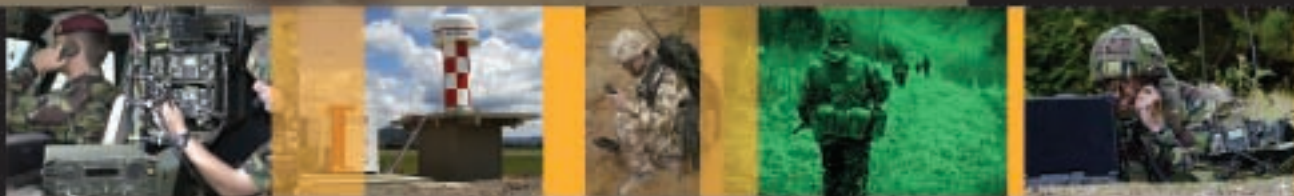


HCDR-C

C E N T A U R

Centaur High Capacity Data Radio - Command (HCDR-C)

- Secure data backbone
- Mobile, self-managing ad hoc network
- High data throughput



ITT

Engineered for life



CENTAUR HIGH CAPACITY DATA RADIO - COMMAND (HCDR-C)

Intelligent, self-managing, mobile, ad hoc network UHF data radio.

ITT, the world's largest supplier of tactical communication systems, bridges the data networking gap with Centaur's High Capacity Data Radio - Command (HCDR-C). HCDR-C is a variant of HCDR, the leader in UHF data communications, which creates networking flexibility from within buildings and other temporary sites. This ad hoc system creates a self-forming, self-healing, self-managing, adaptive mobile network. The HCDR-C is the only radio of its kind creating a communications backbone for messaging, internet and situation awareness supporting mission-critical on the move operations. This battle-proven radio provides high-speed data

information between maritime, ground forces and air support.

HCDR-C's intelligent self-managing capability simplifies operations minimising the requirement for training. With no user input required, simply switch it on and go. HCDR-C is reliable and robust working in the most demanding conditions. All radios have been temperature tested to -35°C to $+71^{\circ}\text{C}$. This tough radio provides high throughput with low latency making it a highly effective networking radio that exceeds the demanding needs of the modern battlefield.

Benefits for mobile command operations:

- Secure data backbone between dismantled headquarters and troops
- Operates without the requirement for vehicles and can be deployed in buildings and tents
- Local trunking system in minutes
- Variety of power sources including vehicular, generators and mains power
- Data communications between combat and logistic troops



HCDR Overview:

- Backbone of the Centaur tactical communications system
- Intelligent, self-managing ad hoc network
- Mobile tactical communications using dynamic routing
- Fully secure with AES 256 bit encryption
- Reduced susceptibility to jamming with low probability of detection or intercept
- Excellent multipath interference immunity

Ease of Use:

- Internet data connectivity with either commercial or military plug and play hardware
- Easy to use – minimal training required
- Simple data interface with VHF and HF communications
- Robust, reliable and combat-proven
- Common equipment for land, sea and air platforms



- ITT's HCDR and its predecessors are deployed with 11 NATO countries
- 4 MHz wide frequency occupancy Spread Spectrum
- Unicast or Multicast IP Capability

Data on the Move:

- Facilitates the rapid transfer of situational awareness information
- Embedded IP router/gateway enabling internet on the move
- Adaptive transmission power and channel data rate with forward error correction
- No dedicated fixed base station required
- High bandwidth with low latency
- Open architecture TCP/IP UHF data networking
- Messaging on the move with most C2 messaging software

TECHNICAL SPECIFICATIONS

Dimensions	194mm x 411mm x 297mm
Weight	14 kg
Frequency range	225 to 450 Mhz
Power output	Adaptive up to 20W
Data rate	Adaptive up to 500 kbps
Embedded COMSEC	UK or export options
Embedded TRANSEC	Yes
Platform	Land, Sea and Air
Operational temperature	-35°C to 71°C incl.solar
Storage temperature	-55°C to 71°C incl.solar
Environmental	Def Stan 00-35
EMC	Def Stan 59-41
Power	24v vehicle
Reliability (MTBF)	>5000 hours
Maintainability	Remove and replace <15 minutes. No preventative maintenance or adjustments.
Test	Full Built-inTest (BIT) fault isolation



ITT

Engineered for life

ITT Defence Limited

Jays Close

Viabes Estate

Basingstoke

Hampshire RG22 4BA, UK

Tel: +44 (0) 1256 311600

Fax: +44 (0) 1256 840556

ittdefence@uk.itt.com

www.ittdefence.co.uk

Registered in England No 2803090. Registered office as above.

HCDR-C01_0907 Approved for public release