Centaur® High Capacity Data Radio - Commander (HCDR-C™)

An intelligent, self-managing, ad hoc network UHF radio providing secure data backbone between mounted/dismounted headquarters and troops.

Exelis, the world's largest supplier of tactical communication systems, bridges the data networking gap with Centaur’s High Capacity Data Radio - Commander (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. This means no fixed infrastructure, and this data network is always available even on-the-move at high speeds. 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°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 dismounted 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
Centaur® High Capacity Data Radio - Commander (HCDR-C™)

HCDR-C 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
> The Exelis 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

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

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Physical Characteristics</th>
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<tbody>
<tr>
<td>Dimensions</td>
<td>194 mm x 411 mm x 297 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>14 kg</td>
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<table>
<thead>
<tr>
<th>System Characteristics</th>
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<tbody>
<tr>
<td>Frequency range</td>
<td>225 to 450 MHz</td>
</tr>
<tr>
<td>Power output</td>
<td>Adaptive up to 20 W</td>
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<tr>
<td>User data rate</td>
<td>Adaptive up to 8 Mbps</td>
</tr>
<tr>
<td>Embedded COMSEC</td>
<td>UK or export options</td>
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<tr>
<td>Embedded TRANSEC</td>
<td>Yes</td>
</tr>
<tr>
<td>Platform</td>
<td>Land, sea and air</td>
</tr>
<tr>
<td>Operational temperature</td>
<td>-35°C to +71°C including solar</td>
</tr>
<tr>
<td>Storage temperature</td>
<td>-55°C to +71°C including solar</td>
</tr>
<tr>
<td>Environmental</td>
<td>DEF STAN 00-35</td>
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<tr>
<td>Power</td>
<td>24 volt vehicle</td>
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<tr>
<td>Reliability (MTBF)</td>
<td>&gt;5000 hours</td>
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<tr>
<td>Maintainability (MTTR)</td>
<td>Remove and replace &lt; 15 minutes No preventative maintenance or adjustments</td>
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<tr>
<td>Test</td>
<td>Full Built-In-Test (BIT) Fault isolation</td>
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