

THE VALUE OF PERFORMANCE.

**NORTHROP GRUMMAN**

## Common SIGINT System 4000

*Powerful capability in a compact unit*



**N**orthrop Grumman's 35 years of design, development, integration and sustainment of Signals Intelligence (SIGINT) payloads is unparalleled in the defense industry. Our company has delivered and deployed over 300 payloads which support our country's warfighters in conflicts across the globe. This experience is the key to the development of Northrop Grumman's newest SIGINT payload - the Common SIGINT System (CSS)-4000.

The CSS-4000 is the next generation of small scale, lightweight SIGINT payloads and is a segment of Northrop Grumman's Airborne SIGINT product line (APL). Several products from this line are operationally deployed throughout the world supporting the warfighter. The CSS-4000 is available today for rapid fielding.

### Unmatched Capability

Northrop Grumman's CSS-4000 SIGINT payload enables rapid interception, signal ID, precision geolocation and processing of communication signals that directly support warfighter missions - all within a 59 lb. payload. The payload's N-channel instantaneous direction finding (DF) capability, combined with its steep depression angle DF processing, enables single ship, multi-INT operations - crucial for the cross cuing of today's EO/IR and full motion video (FMV) sensors. These capabilities support the warfighter with up-to-date, precision targeting data, to ensure mission success.

### Lower Life Cycle Costs

The CSS-4000's architecture also ensures that lifecycle costs are kept to a minimum. The CSS-

4000 offers greater flexibility and expandability through its open standards-based software architecture. Because the CSS-4000 is a derivative of the APL, the system will benefit from upgrades to other products in the APL, lowering sustainment costs.

### System Integration

Northrop Grumman's flexible command and control products provide real time control, situation assessment and analysis tools to precisely identify, locate and archive desired emitters in heavy co-channel signal environments. Combined with these products, the CSS-4000 provides operators these capabilities across a broad class of complex signals in real time. The CSS-4000 can be tailored to specific user requirements.

## CSS-4000 Highlights

- Simultaneous support for both overwatch and standoff missions requiring steep to shallow depression DF
- High accuracy IMINT cross-cueing performance
- Flexible signal processing architecture through on-board programmable FPGAs and Intel compute elements
- Support for active SIGINT enabling CyberISR and Electronic Attack Missions
- Simultaneous support for fast scan, staring and copy functions
- Support for LINUX signal and data processing applications
- Compatible with DCGS-A and DCGS-AF

## SIGINT Features

- Instantaneous, single ship geo-location
- DF and copy with interference cancelation
- Over 500 narrowband digital drop receivers for demodulation and copy
- IMINT cross-cueing

- Emitter mapping across system frequency range
- Signal recognition and characterization with over 600 demod/signal types supported
- Integrated APG capability
- AOCO compliant

## Performance

- 0.5 to 6500 MHz Frequency Range
- 8 channels configurable for receive or transmit
- Coherent operation of N tuners; software reconfigurable
- 85 dB typical dynamic range
- 40 MHz of instantaneous bandwidth per channel
- 1320 GFLOPS peak processing capacity

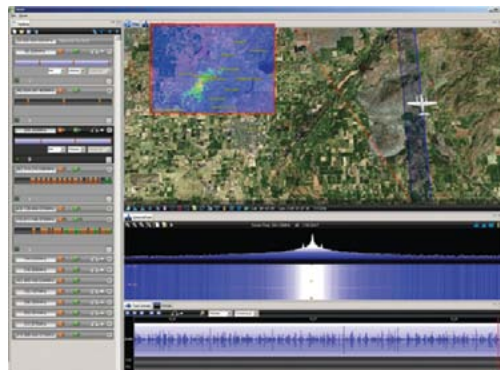
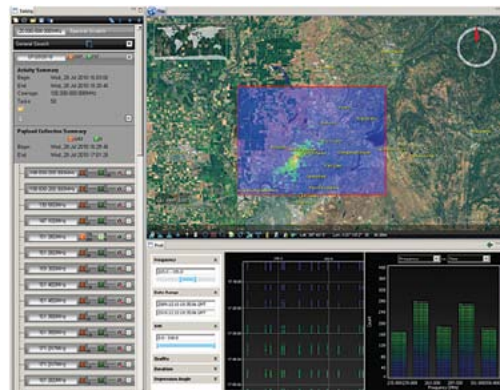
## Physical/Environmental

- Size: 10.12x10.62x22.16 (1 ATR Tall/Long)
- Weight: 59 lbs
- Power: 660 watts
- Operating Temperature: -30°C to +50°C
- Operating Altitude: 0 to 45,000 ft

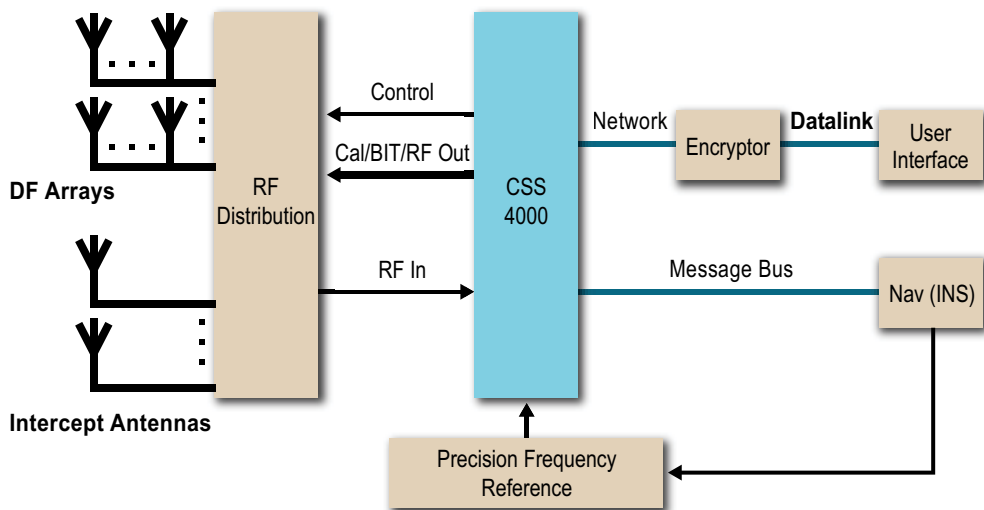
- Control Interfaces: Ethernet, RS232
- Nav/GPS Interfaces: 1553, Ethernet

## Options

- Argus workstation option providing sensor management/control, signal analysis and data forensics
- Increased Rx/Tx channels
- Increased compute elements



Argus PED includes tools for enhanced visualization and forensics.



## For more information, please contact:

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