

Digital High Probability of Intercept Receiver (Digital HPOI)



The SNC Digital High Probability of Intercept Receiver (Digital HPOI) is a continuously staring intercept receiver system. The system provides spectral situational awareness display, emitter lists, and pulse capture with nearly 100% probability of intercept. The Digital HPOI consists of three RF input bands, tuners/digital receivers, and user displays. Customers provide compute resources for user displays and recording storage.

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PERFORMANCE SPECS

HRP Size 19" rack mount per IEC 60297-2

9U tall x 20" deep

HRP Weight 114 lbs., maximum

HRP Input Power 120 VAC, 60-400 Hz, Single Phase

1400 VA max, 30A in-rush for 1 second

HRP Cooling Fan Forced Air

entry in front, exhaust rear

DCU Size 19" rack mount per IEC 60297-2

3U tall x 20" deep

DCU Weight 25 lbs., maximum

DCU Input Power 120 VAC, 60-400 Hz, Single Phase

225 VA max, 6A in-rush for 1 second

DCU Cooling Fan Forced Air

entry in front, exhaust rear

Environments Compliant to L-3 Communications

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HPOI Bandscan Situational Awareness & Controls

FEATURES

16 GHz IBW continuously staring intercept receiver; easily integrated within larger ESM subsystem

- Excellent detection sensitivity via channelized input
- For each input band, the probability of intercept is nearly 100%
- Two primary functions:
 Situational Awareness, Pulse Capture
 - Drives Situational Awareness Graphical Display
 - Generates post-detection pulse level data continuously; recordings are unattended through mission
 - Tabular list of emitter ID's with parameters, modulation types

Supports cycling across 3 inputs for RF / antenna field of view diversity

- Example; cycling between microwave & mmW bands
 - microwave band
 - mmWave Sub-Band 1
 - mmWave Sub-Band 2

Interface to existing Platform RF Distribution

Consists of two chassis

- Downconverter unit (DCU)
- HPOI Receiver Processor (HRP)

Other benefits

 HPOI frees other assets so they might be used more for exploitation



