



Spectrum Monitoring System

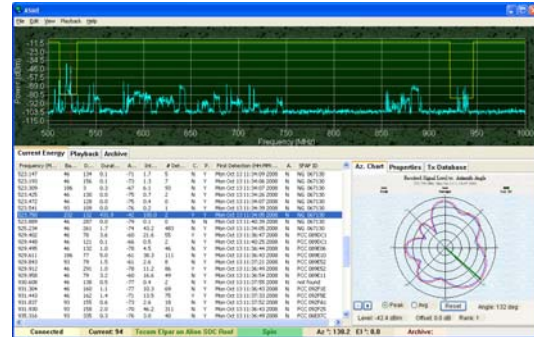
Alion Science and Technology

Alion Science and Technology is at the forefront of electromagnetic spectrum monitoring and direction finding. **Directed Perception's PTU-D300 RF** has been integrated into Alion's Spectrum Monitoring and Direction Finding System that is being deployed at various locations around the world. The system runs continuously, monitoring the radio frequency environment for changes.



*Directed Perception
PTU-D300 RF antenna positioner*

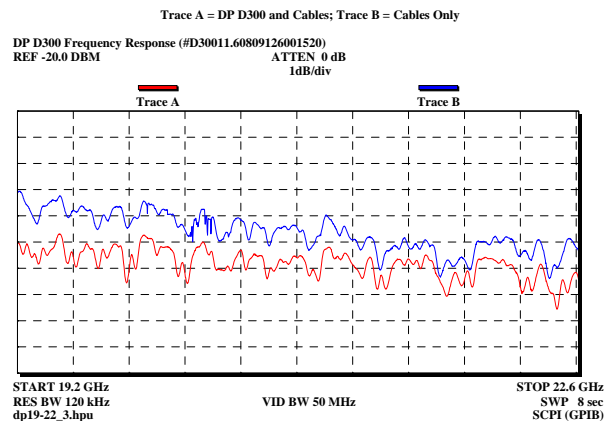
Signals exceeding a mask threshold are cataloged and recorded. The direction find (DF) angle is found from the directional antenna and rotating D300 pedestal. Parametric signal data including time of arrival, percent occupancy, last time of detection, frequency and bandwidth are recorded. Signals are archived for future playback and compared against a database of local emitters to determine a source match. Any potential sources are plotted on a map.



Alion's spectrum monitoring software.

“We needed an antenna positioner which supported continuous rotation, high duty cycle, and real time control. The **PTU-D300 RF** was a good fit for our requirements. We were very pleased with the low insertion loss across the band, and with the level of support we received from the Directed Perception team.”

-- John Grolle, Principal Engineer, Alion



Frequency sweep from 19-22 GHz. The difference between the two traces is the insertion loss of the PTU-D300 RF rotary joint connection.

About Alion Science and Technology (www.alionscience.com)

Alion Science and Technology Corporation is an employee-owned technology solutions company delivering technical expertise and operational support to the Department of Defense, civilian government agencies and commercial customers.

Customer Success Story