Airborne Technologies

Easy Deployable Ground Data Terminal (GDT)

D-ATKS System
Easy moving connections

The ability to deploy a reliable RF link, is becoming more of a necessity with society's absolute reliance on network technologies.

Increasing demand of Airborne Law Enforcement (ALE), Intelligence Surveillance and Reconnaissance (ISR) missions, broadcasting for Electronic News Gathering (ENG) and more, are forecasted for the upcoming years

This research will continue the development of the wireless network relay system using mobile platforms assisted by autotracking or multi directional antennas

IPR has developed a multi version reliable and easy deployable system to fulfil this need for connection: the main shock proof hard shell box can be configured on specific request and connected with different antennas to get the best results in term of connecting distance (up to 200 NM)

Main Sub-asseblies:
- Hard shell
- Shock proof
- Deployable plastic box containing: 1U 19" decoder unit, 3U 19" RX unit, 3U 19" D-ATKS antenna controlling unit

Reliable personalized solutions

All critical technologies' parts are developed produced and integrated by IPR providing an outmost degree of customization: systems can be tailored to end users' specific layout and weight requirements
IPR systems have no ITAR restrictions

Technical Features

Electrical

Input Frequency Band:
1,2 to 6,4 GHz

RF input threshold:
-92 dBm

Demodulation:
COFDM with 2K-4K-8K sub-carriers (DVB-T/H)
QPSK, 16 QAM or 64QAM
Code Rate: 1/2, 2/3, 3/4, 5/6, 7/8
Guard Interval: 1/32, 1/16, 1/8, ¼

Decoding:
MPEG-2 or MPEG-4 (H.264)

Supported Video:
4:2:0 standard

Video Output:
Composite PAL / NTSC; SDI (HD-SD); HDMI

Available Connectors:
Audio output connector
GPS output connector

Supply Voltage:
230 V AC

Encryption:
AES @ 256 bit

Supported Resolutions:
SDI (SD/HD)/HDMI
NTSC SD 60i; NTSC SD 60i (24 fps); PAL
SD 50i; NTSC SD 60p; PAL SD 50p;
HD1080 23.98p; HD1080 24p; HD1080 25p;
HD1080 29.97p; HD1080 30p; HD1080 50i;
HD1080 59.94i;HD1080 60i; HD1080 50p;
HD1080 59.94p; HD1080 60p; HD720 50p;
HD720 59.94p; HD720 60p

Mechanical

Dimension:
7 U (19")

Rack Material:
Water/shock proof plastic

Supported External Antenna(fix or deployable):
Quadripatch (connecting distance up to 22 NM)
Planar Patch (connecting distance up to 32NM)
70Cm parabolic (connecting distance up to 65NM)
90Cm parabolic (connecting distance up to 108NM)
180Cm parabolic (connceting distance up to 200NM)

Other Performances

Connection to Optional External Monitor HD any Size

Ethernet Output Featuring HD Video Streaming Over Portable PC

44m/88m Cable Set IDU to ODU

Dedicated remote D-ATKS antenna tracking software embedding geo referenced maps for quick and reliable helicopter monitoring and settings

Member of CISQ Federation
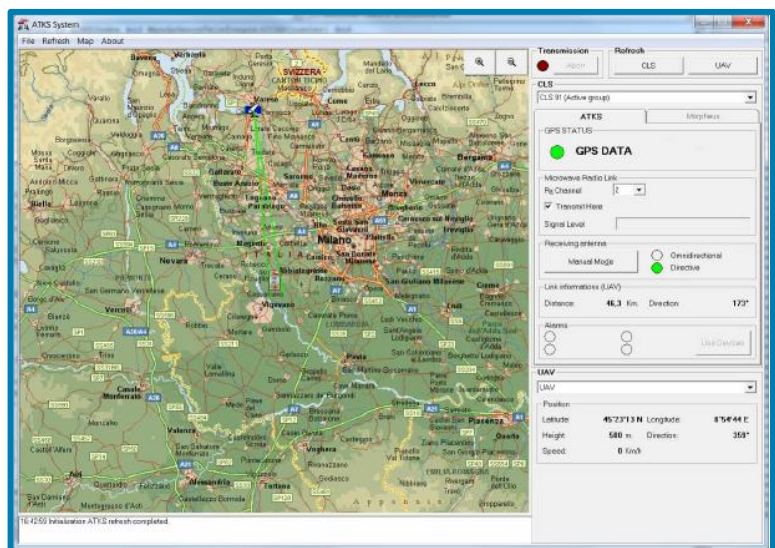RINA
ISO 9001:2008
Sistema Qualità Certificato

lombardia
aerospace
cluster

Pictures Annex

Quadripatch Antenna

180 cm antenna Deployable version

Planar & parabolic 70/90 cm external Antenna

D-ATKS Software screenshot