# **Quantum Imager**

ADVANCED GPR SYSTEM



The triple frequency Quantum Imager by US Radar is capable of significantly greater depths with higher resolution than any other locating technology. Stepped Ultra Wideband Pulses combine the advantages of pulse radar and stepped frequency radar to offer unsurpassed resolution & depth.

New Direct RF sampling technology creates clearer, easier to understand images than previously possible with older radar technologies. All these technologies work transparently behind the scenes to make locating easier.



## **FEATURES**

## STEPPED PULSE TRIPLE FREQUENCY ANTENNA

- Triple frequency antenna means three scans in one
- Sloped antenna design easily glides over obstacles
- Optional GPS integration

# DURABLE, GLARE-RESISTANT TABLET INTERFACE

- Daylight readable, weatherproof Getac tablet interface
- High performance CPU enables real-time data processing
- Built-in 3D view capability
- WiFi supported
- USB, Ethernet, HDMI and Audio ports

# HOT SWAPPABLE BATTERY PACKS

- Two hot-swappable battery packs included in each system
- Each battery lasts a total runtime of 8 hours each
- Battery packs have lifespan of several years

#### **GPS INTEGRATION (Optional)**

- Optional GPS Pole mount
- Enables GPS to be centered over antenna
- Integrates with most high-end GIS and RTK units
- Optional integration with Google Earth

# **AIRLESS TIRES**

- Airless, solid tires that cannot go flat
- Require no maintenance

## **EASY STORAGE**

 Folding cart handle and controller tablet mount for easy storage.

## **SPECIFICATIONS**

#### **GETAC F110 RADAR CONTROLLER**

- Operating System: Windows 7 or 10 64-bit
- Third-generation Intel<sup>®</sup> Core<sup>™</sup> i5vPro<sup>™</sup> Processor
- Durability: MIL-STD-810G, 4-foot drop and all-weather IP65 dust and water resistant design
- Display: 11.6 inch, HD daylight-readable, ten-point multi touch + digitizer
- I/O Interface: Ethernet Port, DC Power Port, 1 USB 3.0 Port, HDMI Port, WiFi and Bluetooth
- Expansion Options: MicroSD or second USB 2.0 port, RJ45 Ethernet. Dedicated GPS
- Communications: Wi-Fi, Bluetooth® and optional 4G LTE or 3G Gobi™

#### **SOFTWARE**

- Microsoft Windows
- USRadar offers a variety of optional onboard and desktop software configurations including
  - o GPS
  - o 3D
  - GIS Mapping
  - o Report Generation
  - o and more!

# SYSTEM SCAN MODES

- Maximum typical logging scan rate of 390 traces per second
- Trigger Modes: Free run, timed interval, shaft encoder, GPS, manual
- Nominal Sampling Rate: 650,000,000 samples per second
- · Maximum Resolution: 100 Giga-samples per second
- Hardware Time Varying Gain: 45dB
- Software Time Varying Gain: 60dB
- Software Flat Gain: 60dB

#### **ENVIRONMENTAL**

- Temperature: -11 deg. to 50 deg. C
- Moisture and dust resistance: IP 65

#### RADAR HARDWARE

- Total System Dynamic Range: >130 dB
- Receiver Dynamic Range: >90 dB
- Sampling Interval: 10 ps-6.4 ns
- Time Range Adjustment Interval: 10 ps
- Pulse Repetition Frequency: 0.1-4 MHz-adjustable
- Samples per Trace: 2-8192, Adjustable
- Effective Bandwidth (typ.): >4 GHz
- Stacking: Automatic
- Transmitter: Stepped Ultra Wideband Triple Frequency

#### **SUPPORT**

- Warranty: 2 Years Parts and Labour
- Complimentary telephone and email technical support