



Staff:

- Electronic Engineers
- Mechanical Engineers
- Computer & Software Engineers

Expertise Fields:

- Control & Robotics
- Imaging & Image Processing
- Instrumentation

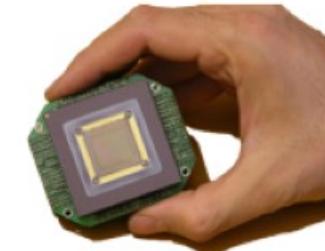
Control & Robotics



Instrumentation



Imaging & Image Processing





PIKA-X2

Robotic Imaging and Measurement System

- Visual Inspection
- Laser Profile Measurement
- Interchangeable Heads
- Car Battery Operation
- Front & Side View Cameras
- Wireless Operation





MOOR I OFF-ROAD ROBOT

- All Wheel Drive
- Full Electric Carriage
- Independent Passive Suspension
- 6 Horse Powers
- Skid Steering
- Odometry & INS Positioning
- IMU , GPS Sensors
- 6 Hours Continuous Operation
- Weight: 20kg
- Size: 80cm X 160cm X 45 cm

MOOR II OFF-ROAD ROBOT

- Off Road Operation
- Visual Inspection
- Wireless/Remote Control
- 3D Laser Surveying
- Instruments Add On (GPR, US etc.)
- Payload up to 10 kg
- Autonomous Operation





MOOR II | OFF-ROAD ROBOT

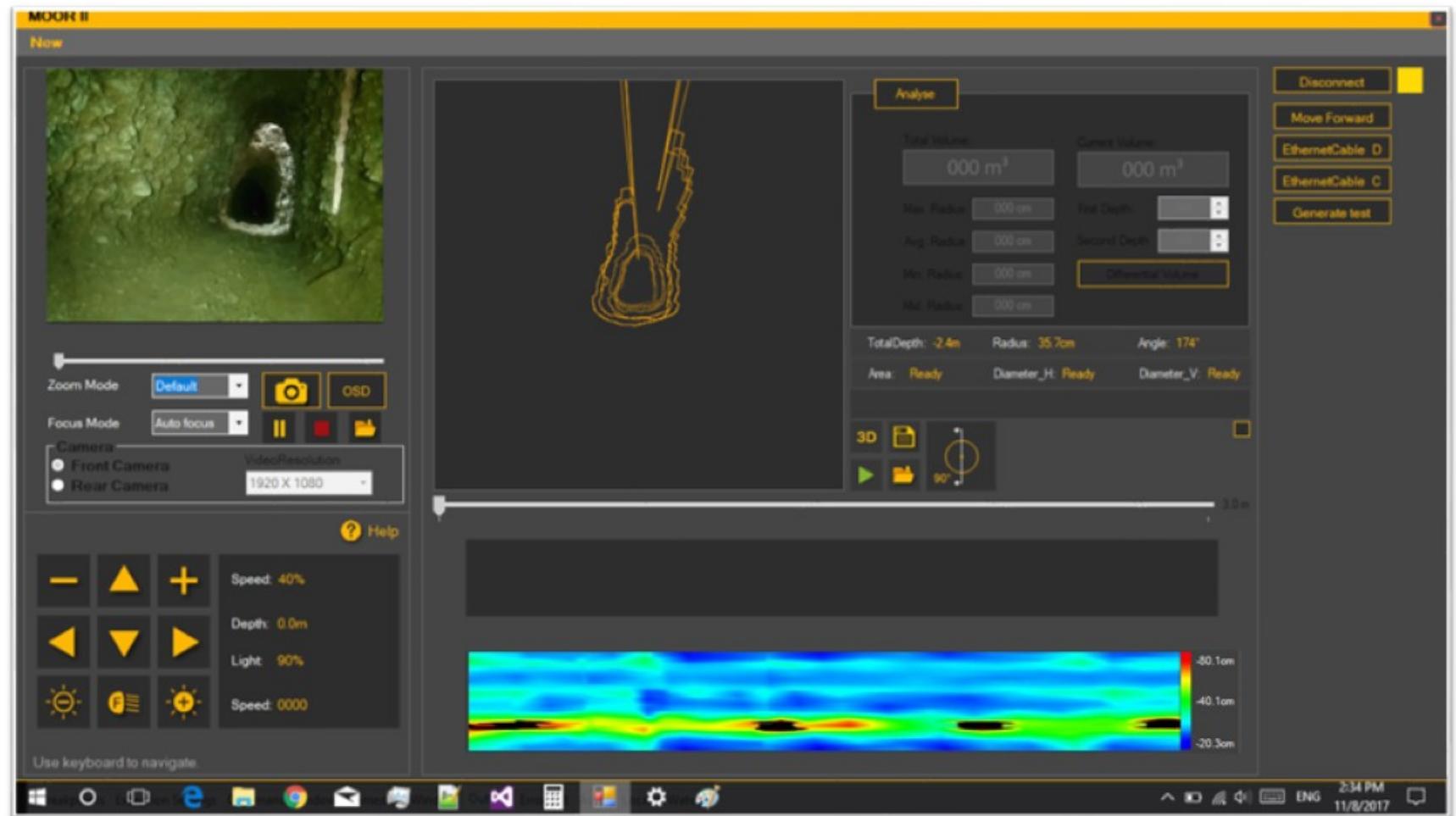
**MOOR II
OFF-ROAD ROBOT
Features**

- All Wheel Drive
- Full Electric Carriage
- Independent Passive Suspension
- 3 Horse Powers
- Skid Steering
- Odometry & INS Positioning
- IMU , GPS Sensors
- 6 Hours Continuous Operation
- Weight: 15kg
- Size: 60cm X 120cm X 45 cm
- 3D Laser Surveying
- Capable of Carrying Instruments (GPR, US, etc.)
- Wireless Remote Control



MOOR II OFF-ROAD ROBOT Software

- Video Inspection
- Full Manual Control
- Volume and Profile Calculations
- Tunnel Profile Visualization
- Filing & Reporting



MOOR III TUNNEL INSPECTION ROBOT

- Carriage/Arm Construction
- Autonomous and Programmed Navigation
- Automatic Visual, Audio and Thermal Inspection
- Manual Control Operation
- Carrying Tools and Instruments up to 20 kg
- Visual and Thermal Imaging
- Detection and measurement of Noises, Vibrations, Temperature, Humidity, Floor Moisture, Smoke and Combustible Gases
- Size (In Max. Reach): 90cm X 45cm X 280cm
- Weight: 125 kg
- High Environmental Protection





RICO SEWAGE INSPECTION ROBOT

(Reverse Engineering)

- Videometry & Profile Measurement of Sewage Piping
- Applicable in PE or concrete Pipes
- Operation Diameter: 100mm ... 2000mm
- Operation Distance: Up to 600m
- Kevlar Reinforced Cable

Software:

- Navigation Control, Monitoring, Filing & Reporting

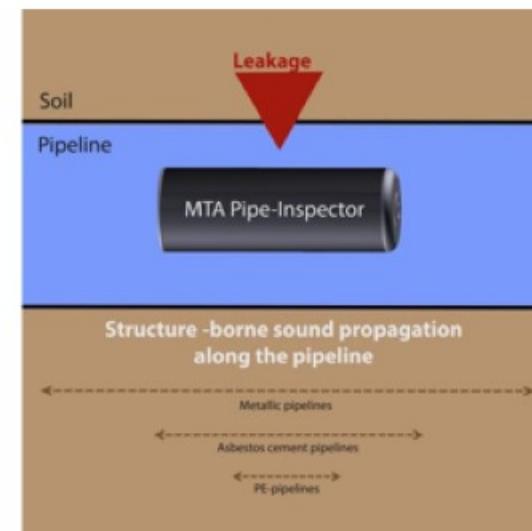


**RICO Sewage
INSPECTION ROBOT
Workstation**



Water Pipe Line and Distribution Network Inspection & Monitoring (Reverse Engineering)

- Water Pipe Inspection Robot
- Leakage detection
- Pipe Surveying
- Water Pipe Quality Monitoring
- No Cable Operation
- Image Recording
- Pressure Monitoring
- Temperature Monitoring
- Sound Recording
- INS Positioning



INSTRUMENTATION

Geotechnics & Geophysics



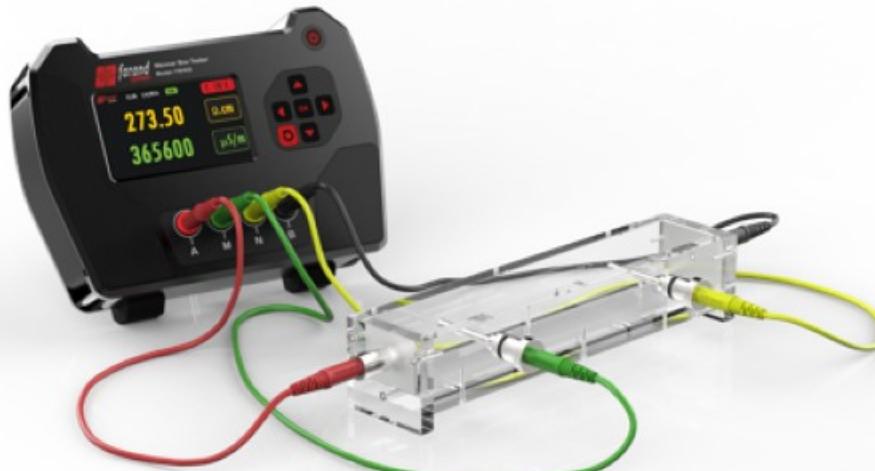
Digital Downhole Seismograph



Ultrasonic Pulse Velocity Meter

INSTRUMENTATION

Geotechnics & Geophysics



Laboratory Wenner Tester



Concrete Resistivity Meter



Sensor Loggers

INSTRUMENTATION

Power distributor module



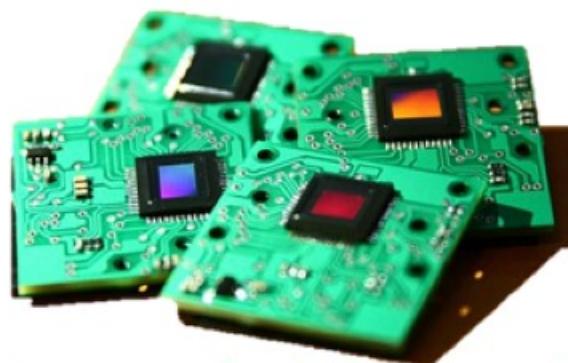
- Programmable Electrical Power Distribution
 - For Cars, Caravans, Boats and Off-Grid Stations
 - 20 Input Sensors (Digital/Analog)
 - 20 Output MOSFET Switches @ 20A
 - 4kW Max Power Consumption
 - Fully Programmable Via Windows Application
 - Overheating Protection
 - Environmental Protection
 - RS485 Communication with PC



Farand Systems | Since 1993
Imaging Control Instrumentation

IMAGING

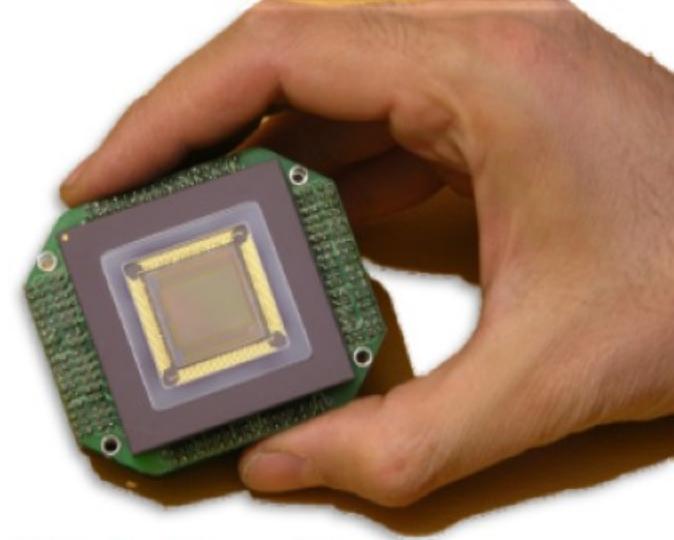
CMOS Cameras with
Real Time Processors



Customizable Resolution,
Frame Rate and Processing Algorithm
CMOS Cameras



Ultra Low-Lag
Real-Time Image
Processing
Using FPGA

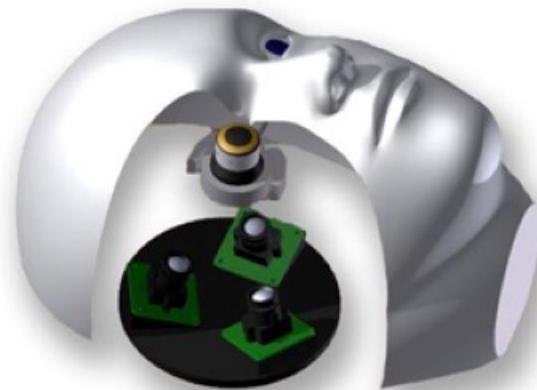


High Resolution
High Frame Rate
Cameras for
Industrial Applications



IMAGING PRECISION MOTION CAPTURE SYSTEM

- Motion Capture System For Eye Surgery Simulator



- Precision Low-Lag Motion Capture System



THANKS FOR YOUR PATIENCE

Farand Systems
April 2020