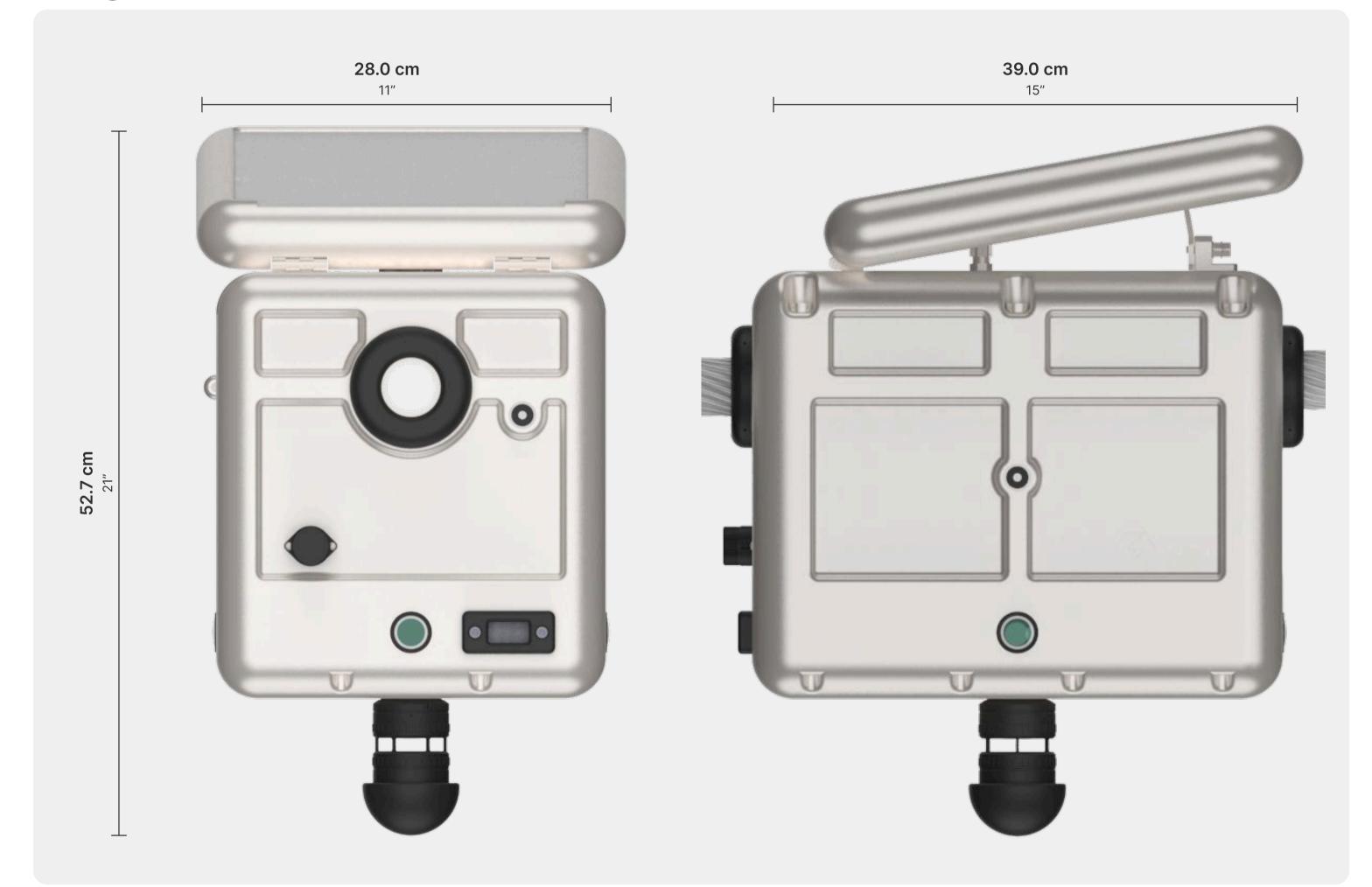


LKX-MULTI

The LKX-MULTI is a line-powered device that installs directly on overhead lines to monitor weather, wildfires, icing, line behavior, and activity—no complex setup, no external power, no guesswork.



Monitor critical locations and streamline maintenance

The LKX-MULTI delivers comprehensive, real-time monitoring of transmission lines using high-resolution optical cameras, line sensors, and precise weather data. Powered autonomously via Laki Power's patented technology, it communicates through high-bandwidth satellite for continuous operation. The 4K cameras detect early signs of ice buildup and galloping events, wildfire smoke in vicinity of power lines and while integrated weather data supports dynamic line rating (DLR) applications to optimize transmission capacity, enhancing grid reliability with minimal maintenance.



Direct Wind Measurements

The only solution on the market that measures wind speed and direction from the conductor.



Optical Cameras for Situational Awareness

Monitors surroundings and gain complete situational awareness with video and images.



Line Powered with Patented Technology

Fully powered by the power line using our patented power harvesting.



Up to 40% Increase in Capacity

Maximize capacity and stay within thermal limits using local line sensors & weather data.

Ultrasonic Wind Sensor

Wind speed & direction, ultra reliable, no moving parts

Speed Range	0-75 m/s (0.1 m/s res)
Direction Range	360° (1° res)
Operating Range	-40°C to +85°C
Accuracy	±0.3m/s at 0-16m/s
Protection Rating	IP66 & IP67

Sensor Technology

Real-time measurements

Conductor Temperature Sensor	Infrared Technology
Conductor Current Sensor Range	0 - 15kA
Conductor Current Sensor Accuracy	±1.0%
Accelerometer Output	Pitch [°], roll [°]
Ground Clearance & Conductor Sag	Calculated using line pitch
Ambient Sensor Outputs Temp	perature [°C] & Humidity [%RH]
Ambient Sensor Accuracy	±0.1°C & ±1.5%RH

Camera System

Powered by NVIDIA Jetson, UHD quality, robust operation

Resolution	4K UHD, 3840×2160, 16:9
Codec Support	H.264, H.265
Protection Rating	IP69
Operating Temp	-40 to 65°C

Intergration & Operations

Powered safely by the line using patented power harvesting

Power Output	+100W DC (depending on current)
Operating Temperature	-40°C to 70°C (with cooling)
Communication Option 1	Starlink Mini High-bandwidth Satellite
Communication Option 2	Sim Card with LTE/UMTS/GSM
Unit Weight	28kg (62 lbs)

Power Line Requirements

We operate on most transmission lines

Max Line Voltage	750 kV
Max/min sub-cond. current	1600A / 80A
Max/min sub-cond. Diamater	50/20mm (<20mm customizeable)
Max Sub-Conductor Temperature	150°C (302 F)
Power Transmission System	AC only