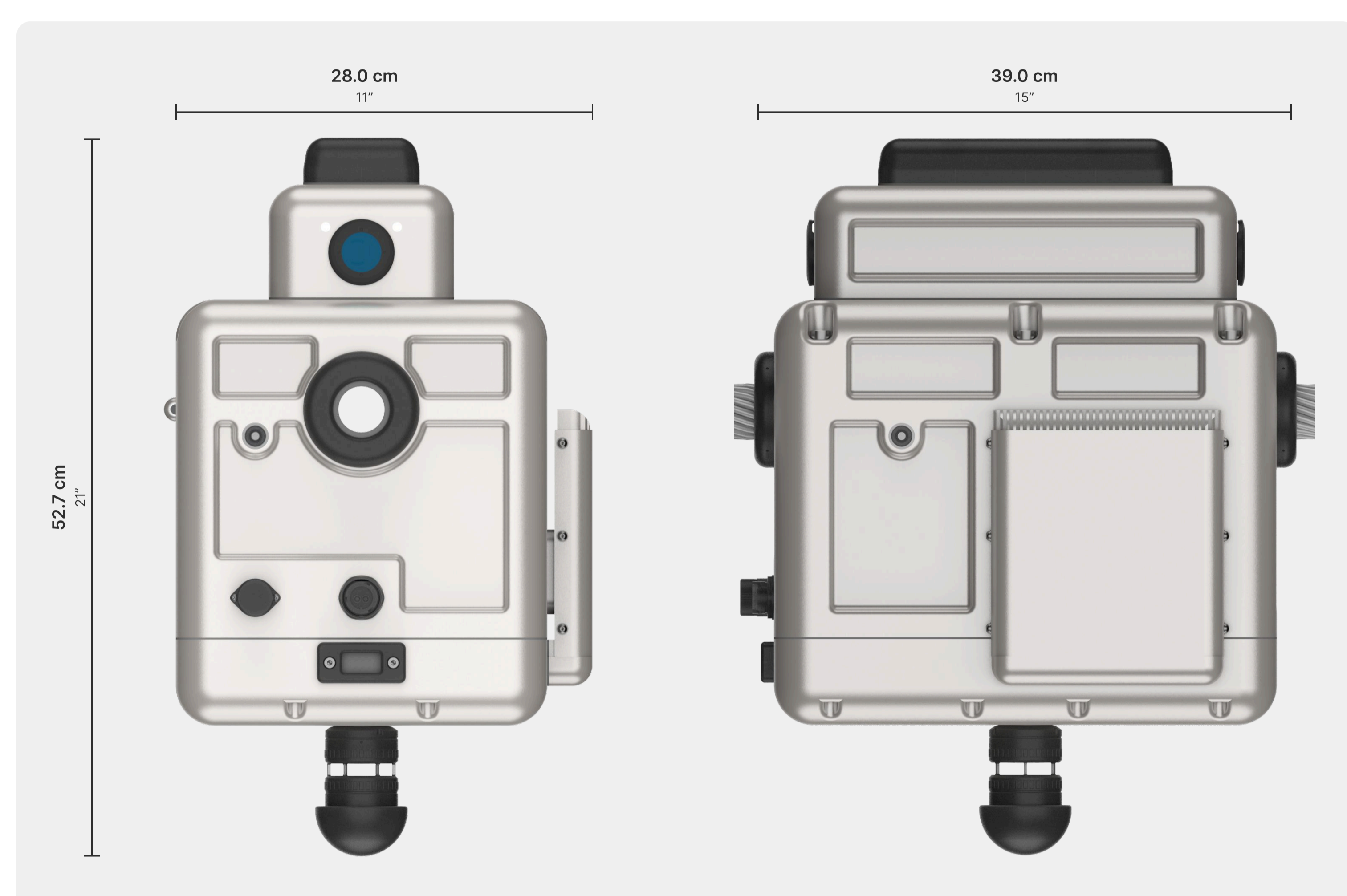


LKX-MULTI (2025)

The industry's only line-powered system with direct wind measurements, offering superior accuracy for capacity optimization.



Unlock More Grid Capacity with Local Weather & Line Data

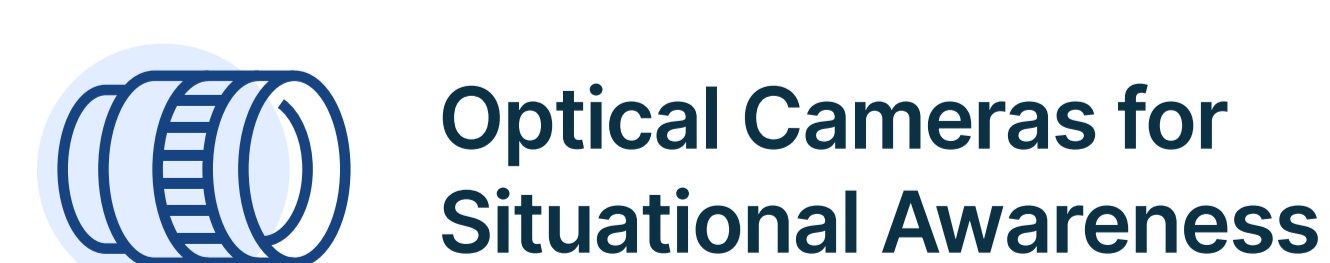
The LKX-MULTI monitoring system is an advanced solution designed to optimize power line performance by providing real-time ampacity data through Dynamic Line Rating (DLR). It utilizes local weather data, including precise wind speed and direction from its unique line-powered sensors, to accurately calculate current and forecasted line capacity. This allows for safe increases in power line capacity, potentially up to 40%, by dynamically adjusting to real-time environmental conditions and ensuring grid operations remain within thermal limits.



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



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



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



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	Temperature [°C] & Humidity [%RH]
Ambient Sensor Accuracy	±0.1°C & ±1.5%RH

Camera System

AI powered, UHD quality, robust operation

Resolution	4K UHD, 3840×2160, 16:9
Codec Support	H.264, H.265, MxPEG+ and MJPEG
Protection Rating	IP66
Operating Temp	-40 to 65°C
In-built Image Recognition	Smoke and Movement Detection

Integration & Operations

Powered safely by the line using patented power harvesting

Power Output	+100W (depending on current)
Operating Temperature	-40°C to 70°C (with cooling)
Communication	Sim Card with LTE/UMTS/GSM
Customizeable Communication	Satellite, Cisco URWB
Unit Weight	37kg (82 lbs)

Power Line Requirements

We operate on most transmission lines

Max Line Voltage	735 kV
Max/min sub-cond. current	2000A / 60A
Max/min sub-cond. Diameter	50/20mm (<20mm customizable)
Max Sub-Conductor Temperature	150°C (302 F)
Power Transmission System	AC only