

## Applications

Road Weather  
Meteorological Observation  
Aviation Weather



# Lufft RWIS Lite – Road Weather Information System – Lite

Flexible and Reliable Ecosystem for Safer Roads

**Low cost and compact station for easy integration into new and existing networks**

**Flexible and rugged station for mission-critical decision making**

**UL Certified for safe and reliable operation across all weather conditions**

**Configurable sensor layout to fit your needs**

**Simplified maintenance due to the standardized and configurable design layout**

### Durable Quality at a Competitive Price

Compact and cost-efficient, the RWIS Lite upholds the renowned Lufft quality. Backed by Lufft's legacy since 1881 and UL certified, Lufft RWIS Lite features robust metal housing and premium components, delivering long-term reliability in all conditions worldwide.

### Flexible Turn-Key Configuration

The Lufft RWIS Lite is configurable weather monitoring system designed to adapt seamlessly to diverse site conditions and data requirements. Its modular design allows for quick configuration, making it ideal for both standalone use and network expansion.

### Seamless Network Integration

With configurations that include all-in-one weather sensors, visibility sensors, non-invasive road sensors, and open communication protocols, the RWIS Lite ensures quick integration and flexible mounting. Its NTCIP compliance guarantees interoperability with intelligent transportation systems, making it ideal for densifying sensor networks or extending coverage without complex infrastructure.

### Streamlined Maintenance and Support

Maintenance is streamlined through a standardized and configurable design layout that is applicable across station networks, minimizing setup errors, simplifying troubleshooting and streamlining repairs. This ensures efficient maintenance, and minimal downtime for long-term deployments.

# Technical Specifications

Operating Temperature	-25 ... 70 °C
Operating Relative Humidity	<100% RH
<b>Enclosure Specifications</b>	
Dimensions	24 x 20 x 10
Material(s)	Aluminum
Rating	UL508A Listed, IEC 60529, NEMA 3R, 4, 4X, IP66
Standard Mounting	2 inch Pole Masts
Input Power	120 VAC
AC to DC Power Supply	Phoenix Contact Trio 120 VAC/24 VDC, 10A, 240W, varistor transient surge protection
Auxiliary Power	GFCI Duplex Outlet, 15A
System Surge Protection	Type 2/3 surge protection for data collection platform
Sensor Surge Protection	Lufft UMB Surge Protection, IP20 protection for UMB sensors
Fuse	2A Fast Fuse, Glass Cylinder
<b>Data Communication: LCOM Option</b>	
Communicator Datalogger and Controller	Lufft LCOM
Communicator Datalogger and Controller Input Power	10 ... 28 VDC
Communicator Datalogger and Controller Input Power Consumption	10 W
Communicator Datalogger and Controller Protection Type	P20
Communicator Datalogger and Controller Display Size	7 in touch screen
Communicator Datalogger and Controller Display Resolution	800 x 480 Pixels
USB Interface	USB2.0B
GPRS/Partyline modem interface	RS-232 on Wago Cage Clamp
UMB bus interface	RS485 on Wago Cage Clamp
RS-485 to RS-232 Converter	Lufft ISOCON-UMB
Cellular Communication	Sierra Wireless RV55 high-performance LTE-Advanced Pro connectivity modem, up to 600 Mbps downlink speeds

<b>Data Communication: UpCom Option</b>	
Communicator Datalogger and Controller	UpCom
Communicator Datalogger and Controller Input Power	9 ... 33 VDC
Communicator Datalogger and Controller Display Size	Optional Touch Screen
Communication Protocols	NTCIP 1205, TLS, OPC-UA, ViewMondo® API Push, FTP/CSV Push
Ethernet Interfaces	2
UMB bus Interface	Via RS-485 Extension Card
Serial Interfaces	Via Extension Card with 2 serial interfaces (one fixed RS-232 and one fixed RS-485)
SDI-12 Interface	Via Optional RS-232/SDI-12 Adapter (e.g., TekBox TBS06-DR)
Camera Integration	http and https (with authentication)
Cellular Communication	Optional Cloudgate LTE Cellular Router
WAN Connection	Ethernet or Cellular
Data Storage	Optional Micro-SD Card (up to 32 GB)
<b>Sensor Options</b>	
Non-Invasive Road Sensor	Lufft NIRS31
Non-Invasive Road Sensor Parameters Measured	Thickness Height of Water/Snow/Ice, Surface Condition (Dry, Damp, Wet, Snow, Ice), Friction, Road Surface Temperature, Saline Concentration
All-In-One Weather Station	Lufft WS600
All-In-One Weather Station Parameters Measured	Wind Speed, Wind Direction, Air Temperature, Relative Humidity, Precipitation Type, Precipitation Quantity, Precipitation Intensity, Barometric Pressure
Visibility	Lufft VS2k or VS20k
Visibility Parameters Measured	Visibility up to 2 km or 20 km
Temperature Sub Probe	SfM Gerabreg Class A Pt100
Temperature Sub Probe Parameters Measured	Sub-surface temperature



Lufft NIRS31UMB  
Non-Invasive Road  
Condition Sensor



Lufft WS600  
Smart Weather Sensor



Lufft VS2k  
Visibility Sensor



Datalogger  
LCOM/UPCOM

