



# Lorenz AI-link® 3<sup>rd</sup> generation

## Technical Information and Measurements

The Lorenz AI-Link® is a powerful onboard edge-computer for UAVs and UGVs. Functioning as the missing link between robot and cloud, the Lorenz AI-Link® leverages 4G to connect UAVs and UGVs to the Lorenz Hive cloud platform. The Lorenz AI-Link® is capable of controlling traditional preplanned missions but excels in intelligent data gathering and reactive behavior through the synergy of onboard control and inference of neural networks.

Intelligent data gathering ensures that only relevant data is captured to reduce bandwidth and avoid GDPR limitations while maintaining subsecond livestream. All features are available in manually operated missions too, supporting ad hoc requirements of e.g. emergency services.

<b>Dimension (mm)</b>	160×42×65
<b>Idle Power draw (W)</b>	7,5
<b>Max Power draw (W)</b>	20
<b>Input Voltage (V)</b>	15-27
<b>Max current (A)</b>	1,5
<b>Power connector</b>	XT-30
<b>IP rating</b>	45
<b>Weight (g)</b>	426

<b>Weight with antennas and mounts</b>	Matrice 300 RTK (513g)	<b>Storage</b>	NVMe 256GB + 32GB eMMC 5.1
<b>Human Machine Interface</b>	RGB LED	<b>RAM</b>	8GB LPDDR4
<b>Operating humidity (%)</b>	0 to 90%	<b>GPU</b>	256-core Pascal
<b>Operating x (°C)</b>	-5 to 50	<b>CPU</b>	2-core Nvidia Denver 64bit + 4-core ARMv8 A57

<b>Connectivity/ IO</b>	USB 3.0, Ethernet (by request), 2*UART, 2*CAN (by request)	<b>Supported gimbals</b>	DJI cameras, Viewpro, TeAx+AlexMos
<b>Supported UAVs</b>	Matrice 300 RTK	<b>Supported sensors</b>	Realsense D435i, T265
<b>Supported UGVs</b>	Capra, Clearpath Jackal	<b>Types of missions</b>	Waypoint, Structure Inspection, Mapping
<b>Supported flightcontrollers</b>	DJI flightcontrollers with OSDK and Pixhawk	<b>Behaviours</b>	Trailer detection, Ladder Scan, Visual Tracking & Following