Lorenz AI-link®

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 mainting subsecond livestream. All features are available in manually operated missions too, supporting ad hoc requirements of e.g. emergency services.

Dimension (mm)	160×42×65
Idle Power draw (W)	7,5
Max Power draw (W)	20
Input Voltage (V)	15-27
Max current (A)	1,5
Power connector	DJI USB-C
IP rating	55
Weight (g)	426

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

Connectivity/ IO	USB 3.0, Ethernet (by request), 2*UART, 2*CAN (by request)	**Supported payload**	DJI cameras, Viewpro, TeAx+AlexMos
Supported UAVs	Matrice 300 RTK	**Types of missions**	Waypoint, Structure Inspection, Mapping, Real time mission planning
Supported UGVs	Capra	**Behaviours**	Trailer detection, Ladder Scan, Visual Tracking & Following
Supported flightcontrollers	DJI flightcontrollers with OSDK and Pixhawk		