Specifications

General

Product	Terra UT Drone
Model	30010
Airframe type	Quadcopter
Radio link	2×DJI Lightbridge 2
Radio link operating frequency	2,400 ~ 2,483 GHz
Radio link EIRP	100 mW @ 2,4 GHz
Radio link compliance (PILOT, NDT)	FCC, CE
Remote controllers	2×DJI Matice 600
Tablets	Samsung Galaxy Tab (2019, 10.1)
Computer	Intel Compute stick Atom-2GB-32GB
OS	Windows 10
Software	UT Bridge
Measuring equipment - Gauge - Wall/roof lite module head - Wall/roof motor cleaner head - Beam module head	 Mistras Eurosonic UTC 110 OEM Dakota 1/2" 5MHz dual element transducer Dakota 3/16" 5MHz dual element transducer Dakota 3/16" 5MHz dual element transducer
Battery content - Terra UT drone battery - DJI Matrice 600 - Galaxy Tab (2019, 10.1)	 Li-Po 5100 mAh × 2 Li-ion 6000 mAh (each) Li-ion 6150 mAh (each)

Physical

Dimensions	730 × 480 × 150 mm
Weight - Base module - Wall/roof lite (WRL) module - Wall/roof motor cleaner (WRMC) module - Beam module - Camera assembly - Couplant dispenser (empty) - Battery	 2470 g 290 g 580 g 1020 g 45 g 80 g 550 g
Weight for configuration (with batteries) - WRL - WRMC - Beam	 3990 g 4280 g 4520 g

Case weight (empty)	~15 kg
Case weight (all components except batteries)	~25 kg
Material	Carbon fibre, PA12

Propulsion

Power supply	Lithium Polymer battery × 2
Battery type	Terra UT drone battery (by Hacker) 5S 5100mAh 96 Wh
Battery voltages - Fully charged - Nominal - Low battery warning - Critical battery warning	21,0 V 18,5 V 17,6 V 17,3 V
Lifting motor	Tornado T5 3115 900KV × 4
Maximum electric power @ TOW 4600g	230 W × 4
Maximum speed @ TOW 4600g	7000 rpm
Propeller	Carbon fibre Diameter 11" Pitch 4,7" Shaft diameter 6 mm

Performance

Launch / recovery type	VTOL
Approved type of operation	Line of sight at all times
Max. operating height	150 m
Max. climb / sink rates	+5 / -3 m/s
Max. turn rate	150 °/s
Max. take off mass (MTOM)	4600 g
Endurance[1] - Without payload - WRL configuration - WRMC configuration - Beam configuration	18 min 15 min 13 min 13 min
Sealing	IP42
Video	1080p 60 fps
Illumination	8 × High power LED (5000 K)

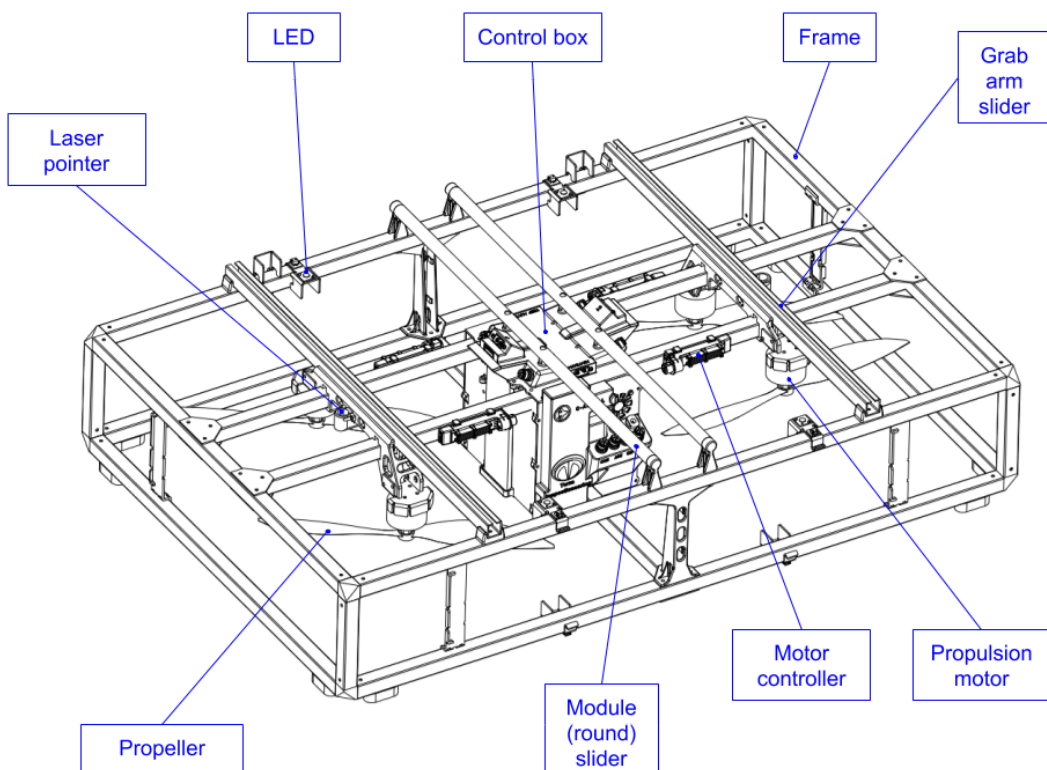[1] orientativel value, may vary depending on ambient conditions, battery age etc.

Environment

Operating temperature limits	-10°C to +40°C
Storage temperature limits	-20°C to +50°C
Humidity	5% - 95% (non-condensing) Operation in rain not allowed
Max. allowed wind speed	3 m/s
Outdoor operations	Daylight operation only
Indoor operations	When walking light is provided

Identification

Each system has a unique serial number which is provided on the nameplate (label) attached on the left side of the base module.

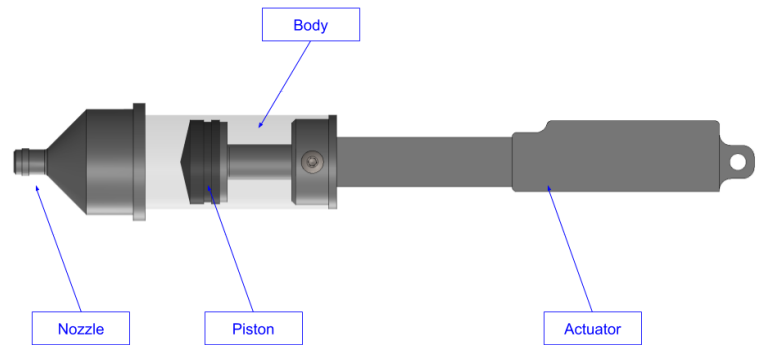Small labels with serial number (SN) are also attached to each of the modules.

Base Module

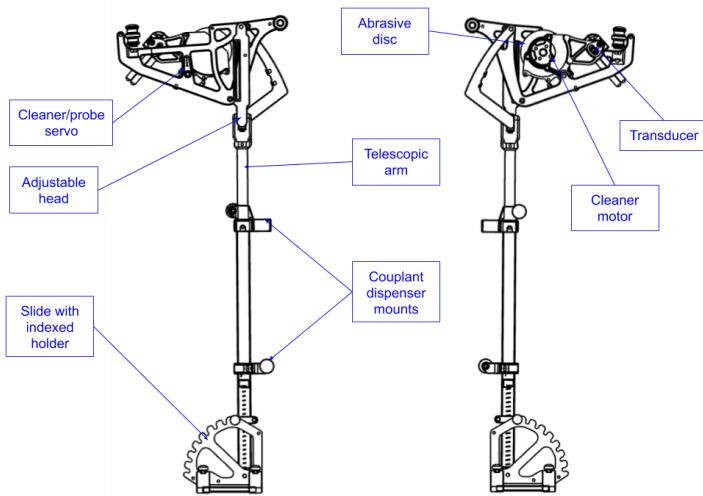# Packing list

The system is packed in a waterproof case.

Base module
Grab arms (4 pcs)
Beam sensor assembly
Gel dispenser
Wall/roof lite module
Wall/roof motor cleaner
NDT tablet
NDT remote controller
PILOT tablet
PILOT remote controller
Wireless keyboard
Battery LiPo 5S 5100 mAh (4 pcs)
Li-Po safe bag (1 pcs)
Charger - main battery (1 pcs)
Charger - remote controller (2 pcs)
Charger - tablet (2 pcs)
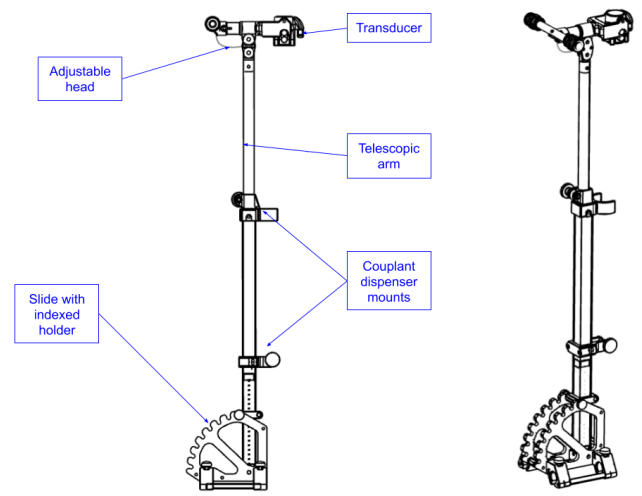Couplant 250 ml bottle (1 pcs)

Spare parts & tools kit with

- Propeller (2 sets)
- M6 polystop nut with collar (5 pcs)
- Cleaning disc (2 pcs)
- O-ring 25×2 (5 pcs)
- O-ring 30×2 (5 pcs)
- O-ring 50×2 (5 pcs)
- Connector cover d10 (10 pcs)
- Screwdriver hex 2
- Screwdriver hex 2,5
- Screwdriver PH2
- Wrench 5,5
- Cutting pliers
- Pliers
- Cable ties (200 pcs)

Couplant dispenser

Wall/roof motor cleaner module

Wall/roof lite module

Terra UT Drone battery