



NAUTI FLY 75/2 AUTOMATIC

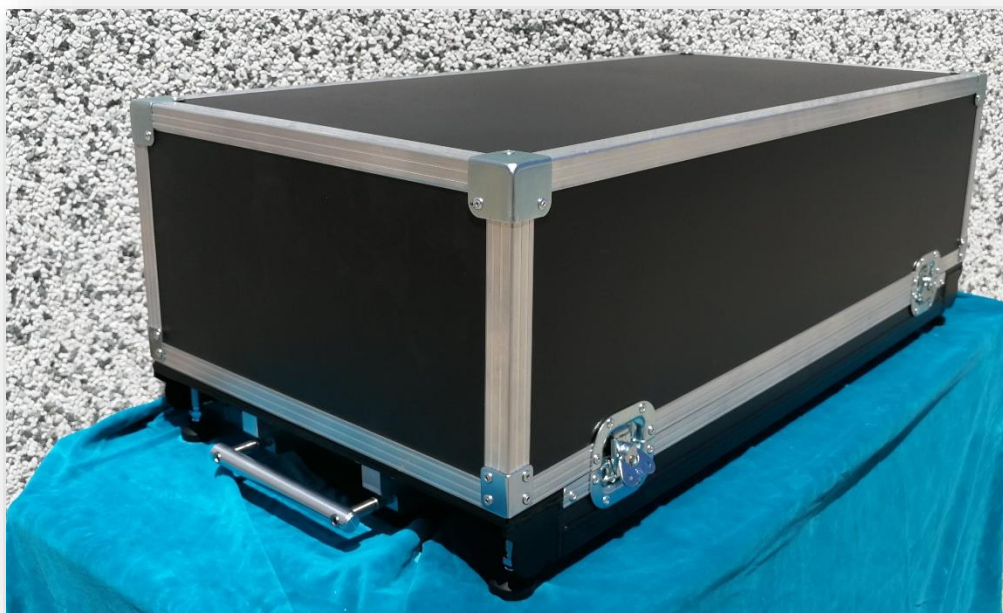
0,75m Ka band Trolley



NAUTIFLY 75/2 is a flyaway antenna for satellite telecommunications in Ka band with automatic pointing transportable by one person enclosed in a single trolley.

NAUTIFLY 75/2 is put into operation in a time of 5 ÷ 10 minutes by a single person.

NAUTIFLY 75/2 can be boarded on an airplane through normal passenger check-in and collected on the conveyor belt as any baggage, the sum of three dimensions smaller than 158 cm and weighing less than 32 kg.



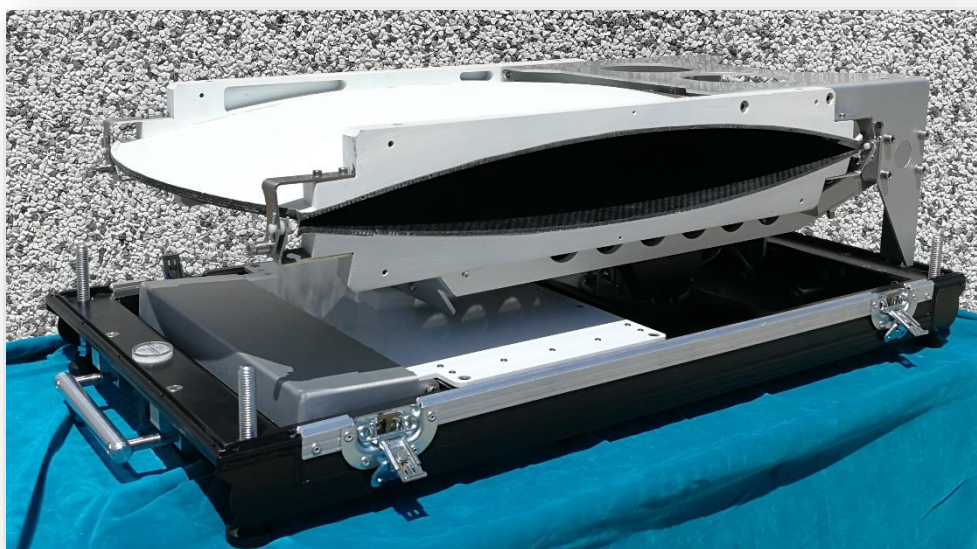
COMPOSITION

NAUTIFLY 75/2 Ka Automatic is a Ka-band satellite telecommunications system, contained in a single trolley for transport. The trolley is composed of:

- a base, equipped with wheels, retractable handles, leveling feet, a bubble level
- a lid equipped with a handle and butterfly closures.

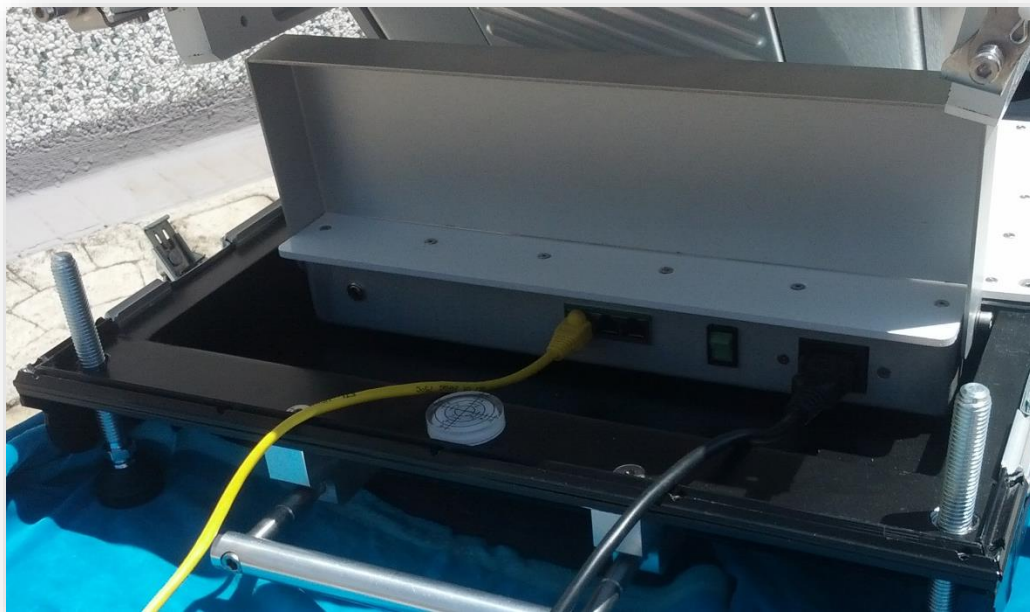
The antenna, mounted on the base, consists of:

- First focus offset reflector in carbon fiber, diameter 0.75m, divided in three parts with the side sectors hinged and folded on the central sector;
- The reflector is folded into the trolley on the feed support arm
- Feed / transceiver support arm hinged on the reflector support bracket for easy positioning in operation and automatic folding in the trolley
- Two-axis movement system: Azimuth and Elevation;
- Automatic aiming of the selected satellite;
- Motor control electronics box



The electronics container is positioned in the base consisting of:

- Power supply with 220 V AC input
- 12 V DC input,
- Control electronics of the automatic pointing system,
- GPS, for the detection of the antenna position
- Electronic compass,
- Wifi,
- Router with 3 Lan sockets,
- Modem for communications



DEPLOYMENT

The suitcase must be placed on a level, facing SOUTH.

After removing the lid, the base must be leveled by using bubble level, acting on the legs 4 places at the 4 corners.

Turning on the switch, the aiming starts and the antenna rises on the base of the trolley, moving to the stand-by position (vertical reflector and horizontal feed support arm)

The commands are given through an application on a smartphone or a tablet.



AUTOMATIC POINTING SYSTEM

The automatic tracking system consists of:

- GPS that provides the coordinates of the place where the antenna is located;
- Electronic fluxgate that provides the orientation of the antenna base with respect to the North;
- ACU that allows to select the satellite and to fine-tune it; in the ACU are loaded the data of the magnetic declination of the completely terrestrial surface to eliminate the errors of the electronic fluxgate.
- Proprietary algorithm to perform automatic aiming by controlling the Azimuth and Elevation positioners

ELECTRICAL CHARACTERISTICS

Antenna:	Ka Band
Reflector:	0,75m offset
Polarization:	circular
Feed and transceiver:	integrated
Technology	VIAsat
TX Power:	3W
Max Power:	4W (opz.)
TX Frequency:	29,50÷ 30,00 GHz
RX Frequency:	19,70÷ 20,20 GHz
TX gain:	44,2dB (tipico a 29,75GHz)
RX gain:	40,1dB (tipico a 19,95GHz)
Az and El moviment	motorized
Automatic tracking via GPS, electronic	Fluxgate and angle sensors
Azimuth range	-90° ÷ + 90°
Elevazione range	0° ÷ 90°
Power Supply	220V a.c.; 30V d.c.
Auxiliary batteries	12V d.c.

MECHANICAL CHARACTERISTICS

Trolley Dimensions	860 x 430 x 290 mm
Weight	less 32 kg
Tightness class	IP67