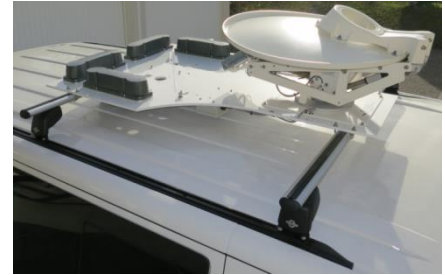


## Ka-Band Terminal / Viprinet Mobile Communication Platform

In order to accommodate the growing demand for mobile and transportable internet SatService provides a modular platform. This platform can include both satellite based communication based on a NewsSpotter Ka band terminal and multichannel VIPRINET routers with LTE and UMTS antennas. The platform can be mounted on any car or van with roof girders. A smaller platform for LTE antennas only and without extension capability to Ka band is available on request.



The **Ka-Band Terminal** is a precision electrical motorized automatic pointing system with access to the IP based NewsSpotter service from EUTELSAT. It is equipped with a GPS receiver, inclinometer, and a TV-LNB for fast pointing results. The LNB enables also receiving of digital TV program from one reference Satellite. The mechanical design is very robust but lightweight due to a sophisticated mechanical design. A 1 RU rack mountable Antenna Control Unit implements an intuitive operation concept on the front panel and also via the integrated webserver.

**Viprinet multichannel VPN routers** are well known for their reliable and failsafe operation based on the bonding of different communication channels. Today's available LTE-Technology provide a high data capacity via mobile networks. SatService has extended these routers with high gain omnidirectional LTE-antennas which ensure a high data throughput over mobile communication networks. The 1,5 RU Viprinet router is accessible a user friendly website.

### Configuration: LTE Antennas + Viprinet Router 2620

LTE Antennas mounted on the platform for installation on roof girders. The platform allows mounting of a Ka-Band terminal at a later date.

List of Delivery:

- Mounting Plate with mounting brackets for roof girders (max width 55mm)
- Qty. 4 omnidirectional MIMO antennas for mobile communication including coax cables to Viprinet Router
- Viprinet Router 2620 with 4 LTE-Modules (without SIM) and one Ethernet Module

Remarks:

- Smaller mounting platform available on request
- Please refer also to Viprinet Datasheet of Multichannel VPN Router 2620



### Technical Details

Dimensions	Mounting platform 900x1420mm, high 82mm with mobile antennas Viprinet Router 2620 19" 1,5RU 320mm deep
Weight	Mounting platform with antennas 32kg, Router 5kg including cables 5m
Power Consumption	Viprinet Router max 75W (100-240VAC, 50-60Hz)
Frequency Range	Viprinet Router LTE, UMTS, HSPA+, EDGE, GPRS 800/900/1800/1900/2100MHz LTE Antenna 790-960, 1710-2170, 2500-2700MHz
Interfaces	Viprinet Router LAN-Interface with DHCP-Server

### Configuration: Ka-Band Terminal

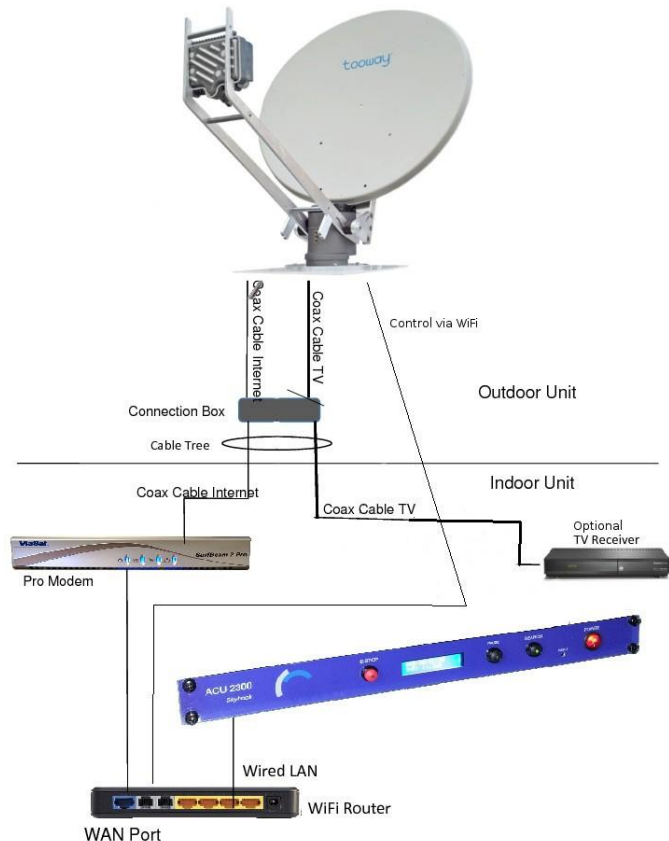
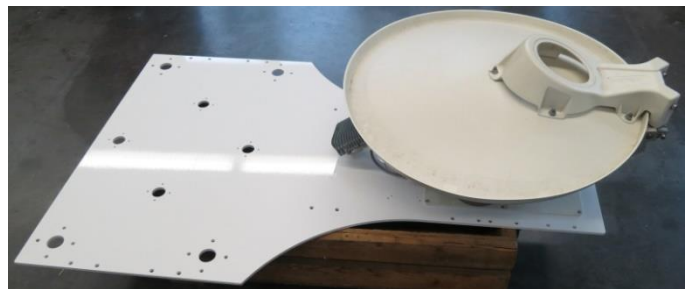
Ka-Band Terminal only mounted on the platform for installation on roof girders. The platform allows mounting of LTE-Antennas at a later date.

#### List of Delivery:

- Mounting Plate with mounting brackets for roof girders (max width 55mm)
- Ka-Band Terminal with
  - e-Tria
  - TV-LNB
  - ViaSat Surfbeam2 Pro Modem
  - Cable set
- Antenna Control Unit (ACU) with integrated webserver and front panel operation
- WiFi Router
- LNB for optional TV Receiver/IRD

#### Remarks:

- Two different services types available:
- Broadband internet on best effort base, max 10Mbps Download, max 4Mbps Upload (Default operation Mode)
- Video Session NewsSpotter Service for fixed data rates in Download and Upload
  - Booking via booking.ipcopter.com
  - Booking at least 15min before transmission with granularity of 15min
  - Download data rates 0 / 1 / 2 / 4 / 8 / 10 Mbps
  - Upload data rates 0 / 0,512 / 1,024 / 3,072 / 4,096 / 6,144 / 8,192 / 10,24 Mbps
- Recommendation are max 6Mbps for 75cm reflector
- Switch on TV Receiver/IRD after auto pointing is completed!



### Technical Details

Dimensions	Mounting platform 900x1420mm, high 250mm in park position, reflector size 80cm, ACU 19" 1RU; Modem and Router mounted in a 1.5RU rack tray
Weight	Mounting platform with Ka-Terminal 43kg, ACU 7kg including cables 5m
Power Consumption	ACU, Modem and Router 80W (100-240VAC, 50-60Hz)
Frequency Range / Output	Ka-Terminal TX 29,5-30GHz, 3W , RX 19,7-20,2GHz, RHCP/LHCP, TX Gain 43.1dBi@29,75GHz, Rx Gain 40.0dBi@19.95GHz, G/T 17.2dB/K@19.95GHz
Data Rates	Best effort internet: max download 10Mbps, upload 4Mbps Video Session: download data rates 0/1/2/4/8/10 Mbps, upload data rates 0/0,512/1,024/3,072/4,096/6,144/8,192/ 10,24 Mbps
Interfaces	Wifi Router LAN-Interface with DHCP-Server, 802.11b/g LNB Output via priority switch (F-Connector)

**Configuration: Ka-Band Terminal +  
LTE-Antennas + Viprinet Router 2620**

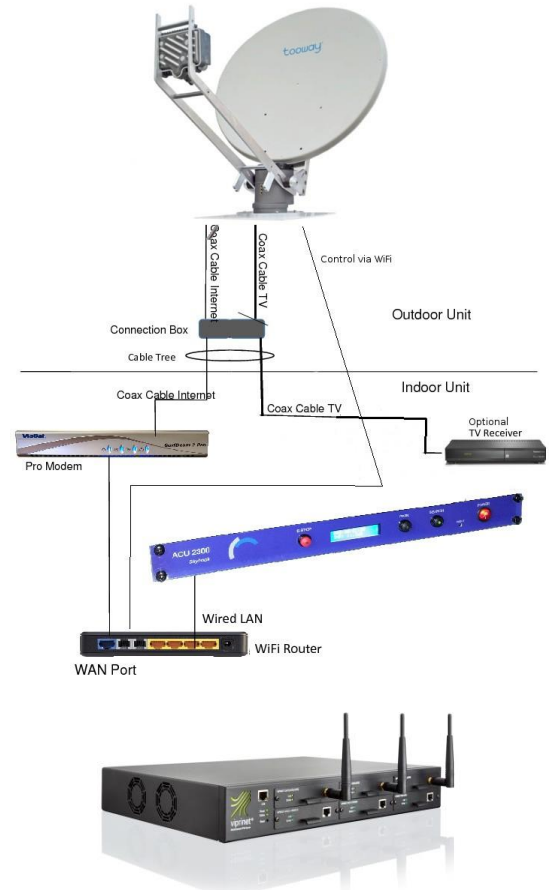
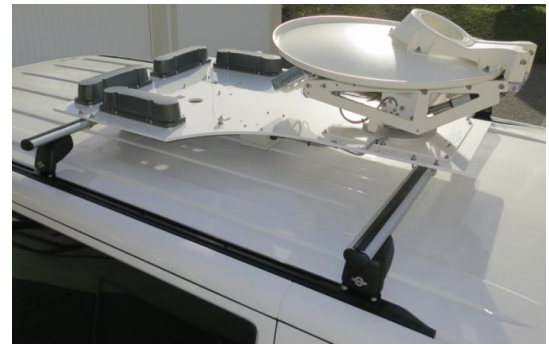
Ka-Band Terminal and LTE Antennas mounted on the platform for installation on roof girders.

List of Delivery:

- Mounting Plate with mounting brackets for roof girders (max width 55mm)
- Ka-Band Terminal with
  - e- Tria
  - TV-LNB
  - ViaSat Surfbeam2 Pro Modem
  - Cable set
- Antenna Control Unit (ACU) with integrated webserver and front panel operation
- WiFi Router
- LNB for optional TV Receiver/IRD
- Qty. 4 omnidirectional antennas for mobile communication including coax cables to Viprinet Router
- Viprinet Router 2620 with 4 LTE-Modules (Without SIM) and one Ethernet Module

Remarks:

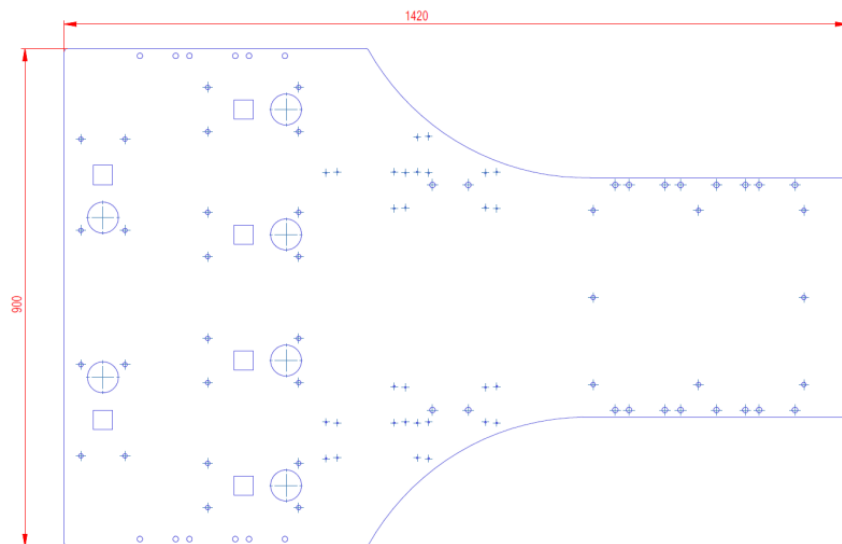
- Two different services types available:
- Broadband internet on best effort base, max 10Mbps Download, max 4Mbps Upload (Default operation Mode)
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  - Booking at least 15min before transmission with granularity of 15min
  - Download data rates 0 / 1 / 2 / 4 / 8 /10 Mbps
  - Upload data rates 0 / 0,512 / 1,024 / 3,072 / 4,096 / 6,144 / 8,192 / 10,24 Mbps
- Recommendation are max 6Mbps for 75cm reflector
- Switch on TV Receiver/IRD after auto pointing is completed!
- Please refer also to Viprinet Datasheet of Multichannel VPN Router 2620



**Technical Details**

Dimensions	Mounting platform 900x1420mm, heigh 250mm in park position, reflector size 80cm, ACU 19" 1RU, Viprinet Router 19" 1,5RU
Weight	Modem and Router mounted in a 1.5RU rack tray Mounting platform with Ka-Terminal 52kg, ACU 7kg, Viprinet Router 5kg including cables 5m
Power Consumption	ACU, Modem and Router 80W, Viprinet Router 75 W (100-240VAC, 50-60Hz)
Frequency Range / Output Power	Ka-Terminal TX 29,5-30GHz, 3W , RX 19,7-20,2GHz, RHCP/LHCP, TX Gain 43.1dBi@29,75GHz, Rx Gain 40.0dBi@19.95GHz, G/T 17.2dB/K@19.95GHz Viprinet Router LTE, UMTS, HSPA+, EDGE, GPRS 800 / 900 / 1800 / 1900 / 2100MHz, LTE Antenna 790-960, 1710-2170, 2500-2700MHz
Data Rates Ka-Band Terminal	Best effort internet: max download 10Mbps, upload 4Mbps Video Session: download data rates 0/1/2/4/8/10 Mbps, upload data rates 0/0,512/1,024/3,072/4,096/6,144/8,192/ 10,24 Mbps
Interfaces	Wifi Router LAN-Interface with DHCP-Server, 802.11b/g LNB Output via priority switch (F-Connecor) Viprinet Router LAN-Interface with DHCP-Server

**Integration Examples**



**Key Features**

- Modular Platform design for easy combination of Ka-Band Terminal and Viprinet
- Precise and Robust Ka-Band Terminal
- EUTELSAT NewsSpotter Service compatible
- High Gain mobile communication antennas for reliable data throughput

**Contact Information**

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