

## **Odin F-60 Satellite Router**

Odin F-60 is a cost-effective, high-performance satellite router for hybrid IP services combining satellite and terrestrial data. DVB-S2/(X)/ACM is used for downlink and can be employed with a variety of terrestrial return channels.



### **Applications**

- Hybrid broadband Internet services over satellite, as CPE in the Forsway Xtend System.
- Content reception and storage from satellite multicast.
- Gateway for multicast ABR streaming.
- Target for running large-scale containerized edge workloads, distributed, and controlled using satellite multicast.

The Forsway satellite router integrates all functionality required for hybrid Internet over satellite connectivity. For simplified installation, satellite service provisioning is completely automatic.

### **Return Channels**

- Integrated LTE modem (F-60 Pro)
- Mobile USB dongles
- ADSL modems and other Ethernet connected network devices

## Technical data

### Key Features

Reception of GSE over DVB-S2(X)/ACM.

High-performance networking

Integrated Wi-Fi Access Point.

Expandable storage (SD card)

### DVB Data Performance

100 Mbit/s from satellite to LAN.

Up to 200 Mbit/s on F-60 Pro.

### Processor & Memory

Dual core ARM Cortex A7, 1.2 GHz

512 MB DDR3

1 GB non-volatile flash memory

Separate network processor

### Connectivity

Ethernet ports for WAN and LAN

Wi-Fi Access Point (Wi-Fi 5, wave 2)

LTE modem (cat 4) and SIM card reader on F-60 Pro.

### Satellite Front-End

Support for DVB-S2(X)/ACM

Input frequency range: 950 MHz to 2150 MHz

Symbol rate support:

- 1-67.4 Msym/s (QPSK, 8PSK, 16APSK)
- 1-60.0 Msym/s (32APSK)

Supported roll-off: 5%-35%

IP Encapsulation: MPE, ULE, GSE

### Software

Linux operating system

Web based user interface

Integrated client for Forsway Xtend

### Front Panel

4 x LEDs: power, return channel connection, Mimir connection, satellite lock

### Power Supply

External PSU: 230VAC/12VDC 1.5A

### Mechanics (excluding connectors)

HxDxW: 38x98x218 mm

### Connectors / Rear Panel

1 x RF input connector, F connector (75 Ohm) for satellite feed

1 x WAN Ethernet port (GbE)

2 x LAN Ethernet ports (GbE)

2 x USB-A ports (1 x USB 3.0 + 1 x USB2.0)

1 x 12V DC input

1 x Factory reset button

1 x SD-card reader (inside casing)

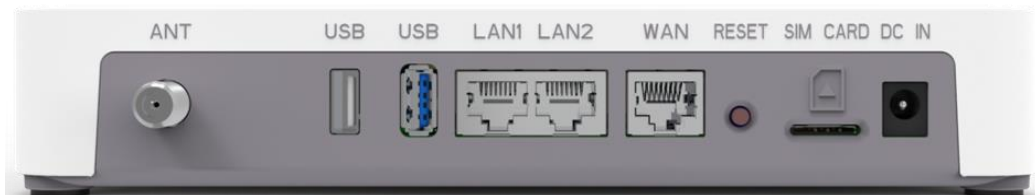
1 x SIM card slot (F-60 Pro)

### Accessories

User manual in English

Optional accessories (extra cost):

- Ethernet cable (2m)
- Power supply



## **Supported Mobile USB Dongles**

### **Huawei**

- Hi-Link dongles (3G and LTE)
- E3372H-320 (LTE)
- E173u (3G) [12d1:1436]
- E173s (3G) [12d1:1c05]
- E173s (3G) [12d1:1c10]
- E173s (3G) [12d1:1c23]
- E169/E620/E800 (3G) [12d1:1001]
- E1820 (3G) [12d1:14ac]
- E3131 (3G) [12d1:151d]

### **ZTE**

- MF190 (3G) [19d2:0117]
- MF190 (3G) [19d2:0031]
- MF190 (3G) [19d2:0154]
- MF636 (3G) [19d2:0033]

### **Other**

- BSNL EVDO CAPITEL (3G)  
[1c9e:9e00]
- ZD Incorporated (3G) [0685:7000]
- NetworkConnect MT6229 (3G)  
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