AR-1100

Ku Band IoT satellite router





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Meet the AR1100

The AR 1100 is a Next generation IoT satellite terminal Powered by AYECKA'S patented RFModem® technology that enables cost effective IoT connectivity as well as a wide band return channel for video and other high bit rate applications.

The AR 1100 Integrates all the elements required for remote IOT terminals in a single outdoor unit designed to operate with small DTH type of reflectors, withstand harsh conditions, and wide temperature range.

The product Supports the latest Standards in SATCOM, designed as a software defined radio.

The AR 1100 terminal is low in CAPEX –terminal cost, and low in OPEX.

Product Applications

HLS applications such as grid monitoring and border control

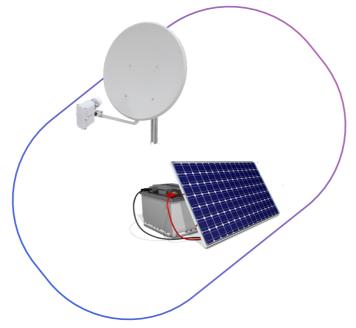
IoT backhaul

Security and surveillance

Agriculture

Green energy

Connected car



Product highlights

- ✓ All in one outdoor unit
- ✓ Low Capex and Opex
- ✓ Wide band return channel
- ✓ Efficient access scheme resulting in low service cost
- ✓ Easy installation antenna pointing and modem commissioning supported by a mobile application (iOS&Android)
- ✓ Efficient SWAP Size, weight and Power. Being compact and supporting energy saving modes for enhanced power saving
- ✓ Allows secured and private networks
- ✓ Friendly interface and ease of use



AR 1100 technical specifications

Standards supported:	
Outbound	DVB-S2/S2X
Inboud	F-SIM, ESSA, RCS2
Modulation Outbound	QPSK, 8PSK,16APSK, 32APSK
Modulation Inbound	BPSK FEC rate 1/3 as per FSIM standard with carriable spreading
Channel Rate Outbound	Up to 60 Msps and 80Mbps sustainable user data
Channel Rate inbound	Up to 1Mbps
Inbound Channel bandwidth	2.5, 5, 10 MHz
Antenna size	From 74 Cm (40 cm possible with long spreading sequences) 75cm antenna is type approved by Eutelsat.
Functionality	Integrated, all in one: feeds array, RF Router and modem
Transmit Frequency	Ku: 13.75 – 14.5 GHz
Receive Frequency	Ku: 10.7 – 12.75 GHz (dual band)
Connection to IDU	F-Type (Ethernet Over Coax)
Tx Output Power	Ku: 1W
Encapsulation	Rx: MPE TX: RLE

Maintenance	Software, Firmware and boot loader are field upgradable using OTA protocol (Flute)
Networking	DHCP, NAT/PAT, SSDP, VLan
IP Routing	Multicast and Unicast, Static and Dynamic
ODU weight	~1kg
Form factor	160 x 76 x 144 mm
Management	Web GUI, REST
Operating Temp.	-33° to 55° C
Rain	<100mm/Hr
Humidity	0% to 100% non-condensing
ODU IDU Interface Functionality	Power up the ODU by DC/Coax
Interfaces Towards ODU	F-type
ODU to IDU cable	RG6, 75 Ohms, up to 100m
Certificates	CE, FCC, IP65

