AQYR
Tactical SATCOM Solutions

DIAMONDBACK AutoAQYR™
Ka-Band Terminal

ViaSat
EXEDE™ ENTERPRISE
AUTHORIZED EQUIPMENT

The Diamondback AutoAQYR™ Terminal delivers affordable high-speed internet access via satellite for workers at temporary sites. The rugged, lightweight full auto-acquisition terminal is based on ViaSat® satellite networking system.

HIGH-PERFORMANCE, COST-EFFECTIVE INTERNET ACCESS ON THE GO

The Diamondback AutoAQYR™ Terminal is designed for users requiring rapidly attainable high throughput connectivity with downstream rates up to 40Mbps and upstream rates up to 10Mbps, in a compact and and portable package. Field reporters, remote medical and peace workers, and emergency responders benefit from high-speed Internet with the convenience of near-instant connectivity even in locations where no other communications infrastructure is available. The form factor is ruggedized to support operation in harsh conditions and supports multiple configuration options to suite user needs. The complete system, including the satellite AutoAQYR terminal and antenna, can be packed into a single case for transit and is lightweight enough to be carried by a single user.

EASY INSTALLATION AND OPERATION

The compact Diamondback AutoAQYR Terminal is designed for a quick and reliable toolless user installation and satellite acquisition in less than 10 minutes by personnel with little to no satellite user training.

TERMINAL AT-A-GLANCE
- Single case portable, airline checkable
- Simple rapid deployment, no tools required
- Easily portable high-speed connectivity
- Ruggedized for operation in harsh environments
- Utilizes affordable, high-capacity Ka-band satellite bandwidth
- Lightweight system weighs only 48 lbs.; 21.8 kg
- Quick set-up and signal acquisition using the unique AutoAQYR terminal for rapid satellite acquisition, less than 10 minutes
- Integrated terminal and remote Web based GUI for complete live terminal operation and status
- Integrated 4-port IP router

APPLICATIONS
- Satellite news gathering
- Emergency response and disaster relief
- Tactical military operations
- Oil and gas exploration
- Search & rescue, natural disaster response
- Network access for real-time data acquisition in remote areas

Request A Quote

Specifications

FORWARD CHANNEL

Modulation/Coding

16-APSK Rate	2/3, 3/4, 4/5, 5/6, 8/9
8-PSK Rate	3/5, 2/3, 3/4, 5/6
QPSK Rate	1/3, 2/5, 1/2, 3/5, 2/3, 3/4, 4/5, 5/6

Adaptive Coding & Modulation

Symbol Rate	10 to 52 MSym/s

RETURN CHANNEL

Modulation/Coding

8-PSK Rate	7/12, 2/3, 3/4
QPSK Rate	3/8, 1/2, 5/8, 3/4
BPSK Rate	1/2

Automatic power control and rate adaptation

Symbol Rate	625, 1250, 2500, 5000, 10000 kSym/s

USER SPEEDS

Forward Channel	Operator configurable up to 40 Mbits/sec
Return Channel	Operator configurable up to 10 Mbits/sec

ANTENNA

Input Frequency	18.3 to 20.2 GHz
Output Frequency	28.1 to 30.0 GHz
Polarization	Standard: Circular, Cross-polarized, with remote switching option
	Optional: Circular, fixed Co-polarized, Arabsat 5C frequency plan, alternative RF specifications
Mounting	Toolless Mounting to Integrated AutoAQYR Positioner
Cable Length	(Typical) 30 m

75cm Reflector

Nominal EIRP	48.7 dBWi
Nominal G/T	17.5 dB/K

ENVIRONMENTAL

Operational	-30° to +60° C
Storage	-40° to +80° C
Altitude	4572 m
Wind	30mph standard – 45mph gusting without ballast
Shock and Vibration	Per ISTA, July 2000, Procedure 1A
Ingress Protection	IP 65

POWER

AC Input – Positioner	Universal Power (100 to 200 VAC, 50 to 60 Hz)
AC Input – Modem/RF	Universal Power (100 to 200 VAC, 50 to 60 Hz)
Power Consumption	<100W / Typical Usage

PACKAGING AND WEIGHT

Packaging Options & Dimensions

1 case with linear dimensions of 78.63in (37.5 X 19.5 X 21.63) Airline Checkable

Case weight with system	< 80 lbs.; 36.3 kg
Terminal Weight	< 48 lbs.; 21.8 kg

INTERFACES

Terminal Power Input	1xMS3116 F12-10
Terminal Ethernet	1x10/100 BaseT, RJ-45
Modem Ethernet	4x10/100 BaseT, RJ-45
Modem Power Input	1xD38999
Modem Power Output	1xD38999
Modem/Antenna /Transceiver	F Connector (male)

NETWORKING

IP Internetworking

Integrated 4-port IP router

Transparent TCP and HTTP acceleration

Packet classification and filtering

POINTING

Full AutoAQYR terminal from Start to Transmit capable <3min

Integrated signal strength indicator in dB via the AutoAQYR Terminal or AutoAQYR remote GUI

MANAGEMENT

Terminal Display or Remote Terminal GUI

Full system management and remote operation

Modem	Web GUI local management
Router	Web GUI local management
Terminal Display	Pointing and status indication
Modem LEDs	Quick terminal status