

BYLIGHT
Lighting The Path

MARS⁵

Powered by DTECH LABS

A By Light Secure IP Gateway Product

SECURE DEPLOYABLE COMMUNICATIONS

The MARS⁵ (Mobile Access Router Secure) provides secure, mobile, high-speed Type I and Type II encrypted communications services. Several outbound vectors guarantee reliable, robust communications no matter where you go.



Features

Airline Carry On

Cisco 3270 MAR

iDirect iNFINITI IP Accelerator

**Ethernet (10/100) Based
Encryptor Connections with on-
board Power**

**Dedicated INMARSAT M4/BGAN
Ports**

**Dedicated Ethernet (Hotel) and
KU VSAT Port**

**GSM (EDGE) /CDMA (EDVO)
and 802.11G**

BLACK/RED Separation

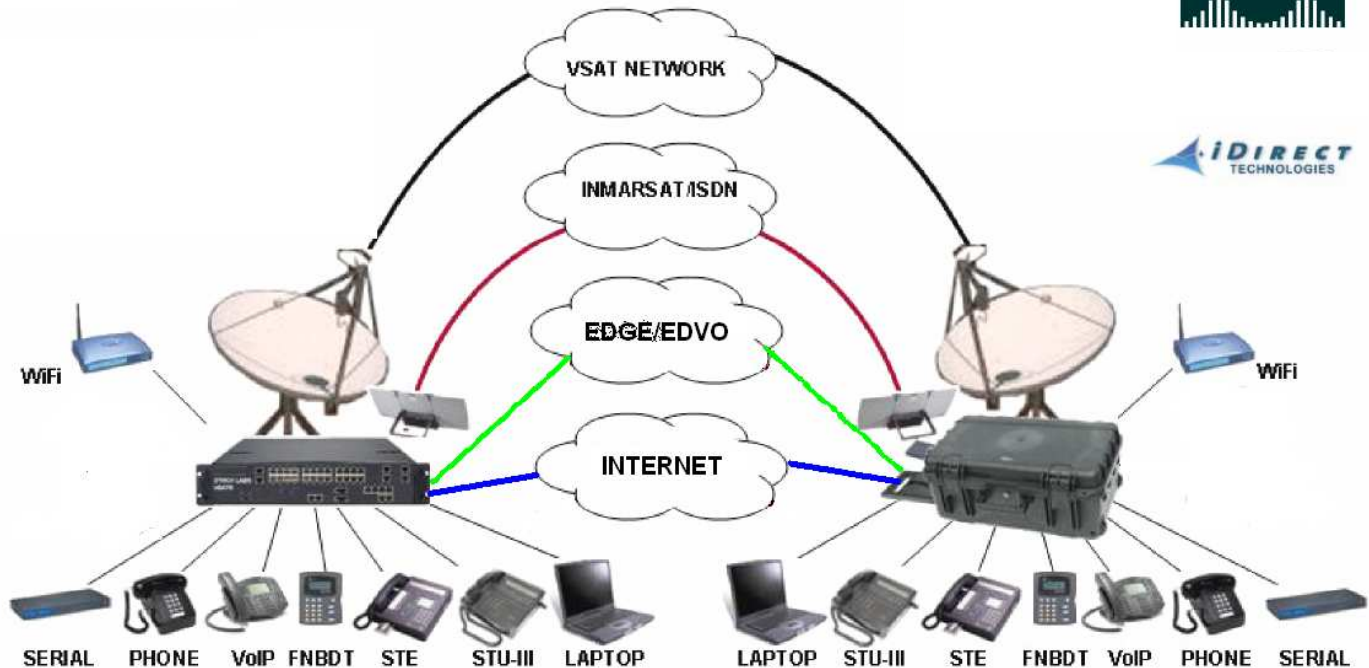
The MARS⁵ is a fully integrated, versatile and mobile communications product. It supports a wide range of WAN and LAN technologies including INMARSAT M4 and BGAN, Ku Band VSAT, GSM (EDGE) / CDMA (EDVO) , 802.11a,b,g, ISDN, Ethernet (10/100), POE, FXS/FXO, Voice Compression and built in IP Acceleration, all in a single case, airline carry-on package.

With the optional roll aboard power unit (35 pounds and airline carry on compliant) the MARS⁵ may be powered for up to 4 hours without the need for vehicle or commercial power.

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VoIP Platform Features

- Embedded WHISPER900 Mobile VoIP Gateway
- SHOUT-IP Software from Network Equipment Technologies (NET)
- Up to 6 simultaneous compressed VoIP calls per 64Kbps Interfaces
- 8 FXS (4 physical interfaces)
- 1 T1/E1 Interface
- H.323v2, SIP (RFC3261), TCP, UDP, BSP
- T.38 Real Time Fax Relay
- Fax Detection
- STU Relay
- STE Support (via STU or FNBBDT) for up to 25 simultaneous calls

Voice Features

- Automatic call type detection, pass-through for voice, modem and fax
- Support for A-law and mu-law encoding
- Voice compression: G.723 (5.3 or 6.3 Kbps), G.729B, G.729AB G.711, G.726 (16, 24, or 32 Kbps), G.727 (16, 24, or 32 Kbps), Netcoder (6.4, 7.2, 8, 8.8, 9.6 Kbps)
- G.168 echo cancellation: 32ms tail size on full duplex
- Fax: group 3 and 4 at 2.4, 4.8, 7.2, 9.6, 12 and 14.4 Kbps
- Voice activity detection, silence suppression, comfort noise generation
- Call progress tone, generation – dial tone, busy, ring-back, and congestion

Interactive Voice Response

- Full platform integration
- No bandwidth usage – wav. files are played locally
- Fully customizable
- IVR support on all TDM and IP interfaces

Routing Engine Features

- Embedded Cisco C3270 Mobile Access Router w/WMIC and Cisco 1721 ISDN Router for BLACK Connectivity
- Cisco 831 Red Side Router

LAN Access Features

- Multi-Port Switch (24 Ports, Managed)
- Full Power Over Ethernet (PoE) Support for remote devices (any 12 of 24 ports)

Acceleration Features

- Embedded iDirect iFINITI IP Accelerator

Encryption Features

- Support for external inline network encryptor (IP or Serial, up to Type 1)
- Supports encryptor bypass for non-secure or test configurations.

ISDN/INMARSAT Configuration

- Embedded Cisco 803 ISDN Router
- Full External Encryption Support

Network Security

- RADIUS via SHOUTgate for AAA, user/password database
- Network Address Translation (NAT)
- DNIS, CLID, call type pre-authentication

Chassis Data

- Dimensions (HxWxD) 3.5" x 17" x 21"
- Weight : Less than 35lbs
- Normal Operating Conditions 40 degrees F to 104 degrees F (5 degree C to 40 degree C)
- Humidity: 20% to 80% non-condensing
- Power: Universal AC
- DC via Optional Power Unit

Case (Airline Carry-on)

- Features: Telescoping Handle/Wheels
- Dimensions: 20.5" x 11.5" x 7.5"

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