

ViPR

Narrowband IP Router & Radio Modem

TCP/IP

Security & Defense

OIL & GAS

SCADA & TELEMETRY

WIRELESS DATA COMMUNICATION

Remote Monitoring

INDUSTRIAL AUTOMATION

WATER & WASTEWATER

ELECTRIC UTILITIES



You no longer have to choose between Ethernet/IP and long range communications; the Dataradio ViPR from CalAmp delivers it all. With 128 AES Encryption the ViPR delivers up to 32 kbps over a long range licensed channel.

Using a Software Defined Radio, the ViPR is programmable for a 25, 12.5 or 6.25 kHz channel. All configuration and programming is done via the embedded web server. Over the air firmware upgrades, and RoHS compliance ensure that your investment today is protected well into the future.

Key Features:

- 1-10 Watts Continuous Duty; software selectable
- 10-30 VDC Operation
- 128 AES Encryption
- On/Off-line Diagnostics for Network Health & Status
- Simultaneous Communications via RS-232 ports and IP/Ethernet
- Up to 32 kbps with superior data compression
- Configures as a Bridge or Router
- Store and Forward for easy network expansion
- Embedded web server for Programming/Setup
- Mesh Networking / Neighbor Discovery
- RoHS Compliant

ETHERNET CONNECTOR
100BaseT - RJ45 Auto-MDX

COM AND SETUP
DE-9F CONNECTOR

Pin	Description
1	DCD: Data Carrier Detect
2	RXD: Receive Data
3	TXD: Transmit Data
4	DTR: Data Terminal Ready
5	Ground
6	DSR: Data Set Ready
7	RTS: Request to Send
8	CTS: Clear to Send
9	Not Used

POWER - I/O
SNAP AND LOCK 4-PIN CONNECTOR

Pin	Description
1	Fan Control
2	Ground
3	B+
4	Enable



Specifications

GENERAL

Frequency Range

VHF: 136 - 174 MHz
UHF: 406.1-470 MHz; 450-512 MHz

Channel Bandwidth

6.25 kHz; 12.5 kHz; 25 kHz (Software Selectable)

Operating Mode

Simplex or Half-Duplex

Size

5.50" W x 2.125" H x 4.25" D (13.97 x 5.40 x 10.8 cm)

Weight

2.4 lbs. (1.1 Kg)

Operating Temperature

-30° to +60° C

Supply Voltage

10-30 VDC, Negative GND

Current Drain at 25° C (Typical)

Rx 480 mA (10V); 250 mA (20V); 180 mA (30V)
Tx 40 dBm (10W): 4.6A (10V); 2.04A (20V); 1.37A (30V)
Tx 30 dBm (1W): 1.23A (10V); 630mA (20V); 440mA (30V)

Cold Start

15 seconds (typical)

Mounting Options

19" Rack mount configuration, DIN-rail option,
Mounting plate/pattern

Approvals and Certifications

FCC, IC (DOC), UL (Pending)

Emission Designators

3K55F1D (6.25 kHz)
8K30F1D, 16K8F1D (12.5, 25 kHz)

TRANSMITTER

Carrier Output Power

1-10 W Adjustable

Radiated Spurious Emissions

Per FCC/Regulatory

Frequency Tolerance

±1.0 PPM

FM Hum and Noise

Less than -45 dB @ 25 kHz

Duty Cycle

100%

RECEIVER

Sensitivity @ 10⁻⁶ Bit Error Rate (BER Typical)

25 kHz: -114 dBm @ 16 kbps; -106 dBm @ 32 kbps
12.5 kHz: -116 dBm @ 8 kbps; -109 dBm @ 16 kbps
6.25 kHz: -115 dBm @ 4 kbps; -106 dBm @ 8 kbps

Selectivity

> 75 dB @ 25 kHz Channel
> 65 dB @ 12.5 kHz Channel
> 45 dB @ 6.25 kHz Channel

Intermodulation

> 75 dB

Spurious Rejection

> 75 dB

Conducted Spurious

Less than -57 dBm

MODEM

Data Rates (User Selectable)

16 kbps, 32 kbps @ 25 kHz
8 kbps, 16 kbps @ 12.5 kHz
4 kbps, 8 kbps @ 6.25 kHz

Modulation

2FSK, 4FSK

Diagnostics

Temperature
Voltage
Local RSSI
Remote RSSI
Forward/Reverse Power
Packet Error Rate

Encryption

AES 128

LED's

Power
Status
LAN Link
LAN Activity
Rx/Tx

CalAmp®