

# BASICS ip

Advanced IP For Satcom Deployment

vocality  
international

BASICS Range



## Introduction

Vocality's multi-function routers and multiplexers are used in their thousands in satellite networks worldwide. Vocality has, one by one, taken the core functionalities from these devices and extracted them to produce significantly lower cost, standalone units so operators with a single requirement need can address it with the BASICS unit that suits them.

'BASICS IP' is a powerful IP board, offering a WAN port and 4 PoE supported network ports. Behind this sits a powerful POWERQUICC™ 3 platform which can be enabled with a number of features. By default, the board is a simple bridge and switch combined, with an IP or optional serial aggregate.

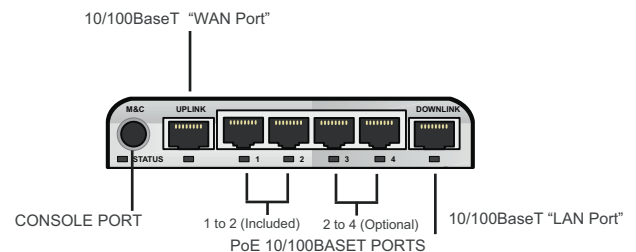
BASICS IP's router functionality includes bandwidth and QoS management, DHCP server and client, RIP, DNS, OSPF, Spanning Tree and proven integration with satellite networks including Vipersat, Skywire, iDirect and BGAN.

## MAJOR FEATURES

- TCP Acceleration
- Packet Aggregation
- Header Compression
- RTP Dejitter and RTP Compression
- Tunneling
- VLAN Support
- Power Over Ethernet
- Small Form Factor
- Low Power

## APPLICATIONS INCLUDE

- Adding PEP Capability to IP Modems
- Provide Satcom Optimisation to third party routers
- Provide Layer 3 Capability to Layer 2 devices
- Optional SIP Based VoIP Gateway Functionality



spec sheet

Remote Satellite Systems  
1455 North Dutton Ave., Suite A  
Santa Rosa, CA 95401  
(888) 989-8199  
www.remotesatellite.com  
support@remotesatellite.com

# BASICS ip

## SPECIFICATION

As well as a boxed version, BASICS is also available as an OEM standalone board, with wraparound aluminium heat-jacket, designed for embedding within satellite modems, integrated size-reduced kits or man-packs. With deployment firmly in mind they will fit almost anywhere! All Vocality BASICS devices are designed to cascade together, ensuring a simple method of adding multiple devices together in expanding sites. The 'BASICS IP' device, for example, can be cascaded with the other BASICS units in a 3 unit stack, delivering four PoE Ethernet Ports and four Voice Ports and four Four Wire ports, which appear as one stack of units.



OEM READY  
FOR QUICK AND  
EASY INTEGRATION

### MECHANICAL:

#### STANDALONE ENCLOSURE 68551/BOX

Form Factor:	Standalone enclosure
Cooling:	Conduction by internal Heat Jacket to case
Operating Conditions:	0-70degC 0-95%RH non-condensing
Shock and Vibration:	TBD
MTBF:	TBD
Dimensions:	123 x 136.5 x 26.5mm
Indicators:	4 blue voice channel status LEDs, 2 blue Ethernet port status LEDs, 1 bicolour red/green status LED, White case LEDs
Max. Weight:	250g (Estimated)

#### Electrical:

Line Input Rating:	5V DC+/-5% @3A
Consumption(typ):	10W (Estimated)
PoE Secondary Input:	-48V DC

#### Connectors:

DC Power:	4-way locking Power Connector
M&C:	6-way Locking Mini-DIN
Ethernet:	6 x 8-way RJ45

#### OEM VERSIONS 68551

Form Factor:	PC104plus card with Heat Jacket
Cooling:	Conduction by Heat Jacket to host
Operating Conditions:	0-70degC 0-95%RH non-condensing
Shock and Vibration:	TBD
MTBF:	TBD
Dimensions:	95.89 x 90.17 x 15.1mm
Indicators:	LED Drivers available. Refer to Appendix.
Max. Weight:	150g

#### Electrical:

Line Input Rating:	5V DC@3A
PoE Secondary Input:	-48V DC
Consumption(typ):	15W (Estimated)

#### Connectors:

DC Power:	Screw-down terminals
M&C:	Via 10-way AMP System-50 RA connector for LEDs/console
Uplink, Downlink Ethernets:	UTP on 10-way AMP System-50 RA connector
Switch Port Ethernets:	4 ports on single 34-way AMP System-50 RA connector

### FUNCTIONAL (Common to all Form Factors):

#### M&C Port:

Electrical Interface:	V.24/RS232 serial
Format:	Async 9600bps (115200bps during software upload), 8, N, 1
Protocol:	Formatted terminal emulation or TTY mode

#### 10/100base-T Ethernet Ports:

Number of Ports:	2+4 (Uplink, Downlink plus four switch ports)
Presentation:	Auto-MDIX
Formats:	IEEE 802.3i(10base-T), IEEE 802.3u(100base-TX)
Protocol Support:	DNS Client, DHCP Client/Server, Telnet, RIP V2, OSPF
Functions:	(NB switch ports share the same MAC and subnet) Vocality IP Aggregate, IP passthrough, SIP voice gateway IPv4 router DHCP Client/Server/Relay OSPF RIP V2 UDP Relay for Broadcasts Fragmentation and Reassembly Bandwidth management IEEE802.1d Spanning Tree Bridging IEEE802.1af Power-over Ethernet (PoE) IEEE802.1q VLAN support

### SOFTWARE OPTIONS

The following software options may be enabled by installing a Feature Key.

(1) SWF/PEP	TCP Acceleration - based on Vocality PEP
(2) SWF/SNMP	SNMP management option (SNMP v2c & v3 traps)

### HARDWARE OPTIONS

#### 68552 BASICS IP Serial Module:

Electrical Interface:	RS530
Format:	Synchronous transparent
Number of Ports:	1
Presentation:	DTE (or DCE by cable selection)
Speed:	Up to 25Mbps
Connector:	Via DB25 connector for BOX version Via 10-way AMP System-50 RA connector for OEM version

"BASICS IP is a product under continuous development. Information given in these pages is for general information only and is subject to change."