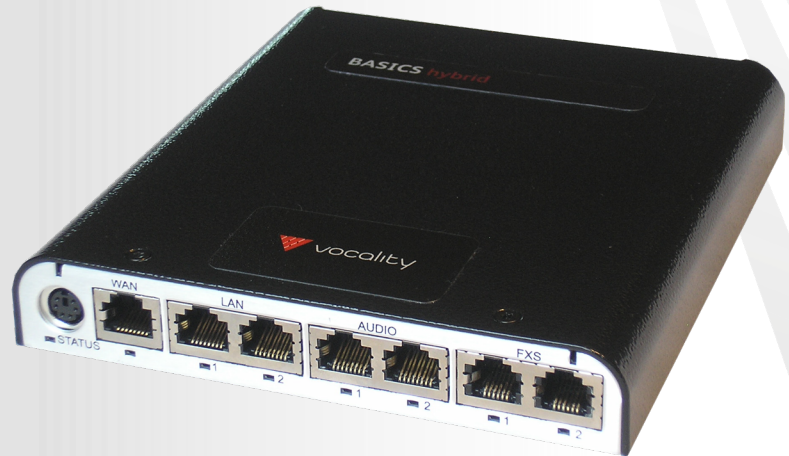


BASICS Hybrid Datasheet

KEY FEATURES

- ▼ Flexible unit supporting IP, serial and voice connections
- ▼ Radio and analog phone connectivity, including secure voice
- ▼ Compatible with IP telephone systems such as Asterisk, Cisco and Avaya
- ▼ Machine to machine serial interface support



COMPATIBLE WITH



IP Router



Acceleration



Network Security



Four wire



Secure voice



POTS voice



VoIP



Serial data



Hand portable

BASICS Hybrid is the smallest all-in-one solution for getting almost everything over an IP network.

VOICE, VIDEO AND DATA CONNECTIVITY

When you cannot predict exactly what will be required, or where applications require a diverse range of connectivity options, including video, VoIP, RoIP, secure communications and serial controlled devices, BASICS Hybrid is the perfect solution.

LOW SIZE, WEIGHT AND POWER

BASICS Hybrid takes size reduction seriously, with a palm-sized, fully integrated router capable of essential tactical communications. This is ideal for fast responders, field reporters and tactical operators.

The mixture of voice, data, serial and radio relay, makes BASICS Hybrid the ideal solution for the fast responder or the field communicator needing immediate access to communications, through push-to-talk radios, phones and laptop data services.

BOXED AND INTEGRATOR READY

The BASICS Hybrid can be supplied either as a boxed product (this datasheet) or as a PC104 board (refer to separate datasheet) for system integrators. The most integrated communications baseband-ready device available in the world today.

SUPPORT FOR MULTIPLE SYSTEMS

This unit can support connectivity to many different manufacturers' equipment (phones, radios or PBXs) including CISCO, Avaya and Asterisk. This leads to a unified system, regardless of the analog brand or technology.

OPTIMIZATION AND ACCELERATION

Vocality's optional voice optimization and data acceleration are included as standard, able to reduce the bandwidth required by up to 60%. Ideal for use over satellite networks.

Technical Data

MECHANICAL

Form Factor:	Standalone enclosure
Cooling:	Conduction by internal Heat Jacket to case
Operating Conditions: boxed*	0degC to +60degC ambient 0-95%RH non-condensing
MTBF:	>150,000hours at 60degC
Dimensions:	5.77 x 6.46 x 1.04in / 146.5 x 164 x 26.5mm
Indicators:	2 blue FXS voice channel status LEDs, 2 blue 4-wire voice channel status LEDs, 3 blue ethernet port status LEDs, 3 blue serial data port status LEDs, 1 bicolor red/green status LED, white case LED
Weight:	1.36lb / 618g
Supply Input Rating:	5-28V DC@3A
Mains Adapter:	100-240V AC @1A, 50-60Hz (Output 5V DC@4A)
PoE Secondary Input:	-48V DC isolated
Consumption (typ):	4.2W (6.4W max excluding PoE loads)
DC Power:	4-way locking Power Connector
M&C:	6-way Locking Mini-DIN
WAN, LAN Ethernets:	3 x 8-way RJ45
Analogue voice:	2 x RJ11(FXS) + 2 x 8-way RJ45(4-wire)
Serial data:	Asynchronous 2 x DB9, Synchronous 1 x DB15HD
Reset:	Via concealed push-button on rear panel
Part number:	68562/RP

FUNCTIONAL

M&C Port:	V.24/RS232 serial
Format:	Async 9600bps, 8 data bits, no parity, 1 stop bit (115200bps during software upload)
Protocol:	Formatted terminal emulation or TTY mode
10/100base-T Ethernet Ports:	1 + 2 switched
Presentation:	Auto-MDIX
Formats:	IEEE 802.3i(10base-T), IEEE 802.3u(100base-TX)
Protocol Support:	DNS Client, DHCP Client/Server, Telnet, RIPv2, OSPF, SSH, IKE/IPSec
Functionality:	Vocality IP Aggregate, IP routing, SIP voice gateway, IPv4 router, DHCP Client/Server/Relay, UDP Relay for Broadcasts, Fragmentation and Reassembly, Bandwidth management, IEEE802.1d Spanning Tree Bridging, IEEE802.1q VLAN support
Analogue voice/FAX ports:	2 x FXS + 2 x 4-wire
Interfaces:	2-wire FXS for connection to telephone with ring voltage/cadence generation and dial pulse/ring trip detection 4-wire Tie-line with Type V E&M keying activation and loop output. Gain adjustment range +8.75 to -34dBm and DC bias for direct microphone connection.
Signaling:	E&M, Pulse, DTMF, Call Progress
Echo cancellation:	G.168 adaptive (16/32mS tail)
Coding delay:	Per algorithm
Gain:	± 31dB programmable in 1dB
Compression:	G.723.1 (5.3/6.3kbps MP-MLQ), G.729 Annex A (8kbps CS-ACELP), G.726 (16-40kbps ADPCM), G.727 (16-40kbps E-ADPCM), G.711 (64kbps PCM) μ -law or A-law
Relays:	DTMF, Group 3 FAX relay at 2400-14400bps Subject to Feature Key: STU IIB, STU III, STE in STU III mode & FNBDT at 4800-9600bps, V.32bis Modem relay up to 14400bps
Asynchronous serial ports:	2
Electrical interface:	V.24/RS232 serial as DTE
Speeds:	Async up to 115200bps at standard baud rates
Format:	5-8 data bits, OENMS Parity, 1, 1.5 or 2 stop bits
Protocol:	Transparent
Synchronous serial port:	1
Electrical interface:	RS449, RS530, RS530A
Speeds:	Sync int/ext clocks at 25bps multiples up to 9600bps, 800bps multiples to 512kbps, 8kbps multiples to 5.12Mbps
Sync Format:	Transparent or HLDC NRZ/NRZI
Clocking:	Independent RX/TX with EXT, INT, PLL sourcing
Function:	Aggregate only DTE
Aggregate Protocol:	Vocality Proprietary Packetized

SOFTWARE FEATURE KEYS

SWF/UMR2	Universal Modem Relay for 2 ports
SWF/SNMP	SNMP Software Feature Key
SWF/VLAN	VLAN Feature Key

* When the equipment is adequately protected from direct user contact, the equipment will reliably operate with an ambient temperature within the specified range. When the equipment is installed in a user-accessible location, adequate heatsinking must be provided to ensure the case temperature does not exceed 70degC (BS EN60950-1:2006 Table4C) for user protection.

BASICS Hybrid is a product under continuous development.

Information subject to change. Correct at time of printing, Mar 2017.

Please be advised that Vocality offers two variants of VOS software — one including IPsec and SSH features and one without these features. The IPsec / SSH variant of the software is subject to UK dual-use export control restrictions, whereas the software without IPsec / SSH is not subject to specific export control.

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