



OmniAccess 5320 BG

Business Gateway



User's Guide

Important Information

Loss of Power/DSL Service

Alternative arrangements should be made to enable you to contact the emergency services during a power failure or failure of the DSL service.

Safety

Use only the mains power adaptor provided. Use of this product with any other mains power adaptor may damage the unit and will invalidate its approval. The mains connection must be provided with a Safety Earth

The BRI Ports, when configured in NT Mode, have a port classification of SELV. As such these ports **MUST NOT** be connected to any TNV rated network. If there is any doubt, contact your service provider.

ADSL & PRI ports must be protected from over voltage

If the OmniAccess 5320 BG needs to be relocated, disconnect all telecommunications lines before switching off.

Do not plug the DSL line into any port other than the DSL port, as this may damage the product

There are no user-serviceable components inside the OmniAccess 5320 BG. If a fault develops with the product, please contact your service provider.

The casing should **NOT** be opened under any circumstances as it contains hazardous voltages and will invalidate the warranty.

Disposal



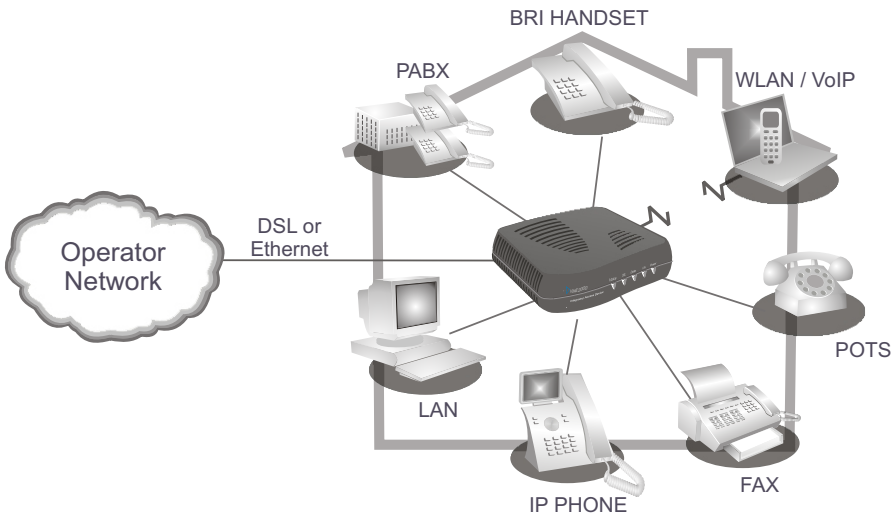
In accordance with EU directive 2002/96/EC regarding Waste of Electrical and Electronic Equipment (WEEE), ensure that at end-of-life you separate this product and its accessories from other waste and scrap and deliver to the WEEE collection system in your country for recycling.

For more information please contact your local city recycling office or the dealer from whom you originally acquired this product.

About the OmniAccess 5320 Business Gateway

Introduction

The OmniAccess 5320 BG is a business gateway suitable for use in a commercial, light-industrial or business environment. It connects you to your DSL service provider using your existing telephone line. Your service provider should have enabled this service for you.



Your Telephone Service

The OmniAccess 5320 BG is fitted with one or more of the following port options (or a combination) to support your telephone requirements:

- POTS (Plain Old Telephony System) ports for analogue phone and fax
- BRI (Basic Rate ISDN) ports for your digital telephone/PABX equipment
- PRI (Primary Rate Interface) for your digital PABX equipment

Internet Access

Depending on product type, the OmniAccess 5320 BG may be fitted with up to 4 Ethernet ports.

Mains Operation

The OmniAccess 5320 BG is mains powered via the supplied mains power adaptor.

Warning! Only use the mains power adaptor provided. Use of the OmniAccess 5320 BG with any other mains power adaptor may damage the unit and will invalidate its warranty and approval.

The adaptor is connected to the mains via a detachable 2 metre IEC320 type C13 power cord.

Important! Power must always be present for maintenance of communications. Alternative arrangements should be made to enable you to contact the emergency services during a power failure.

The Front Panel

Please note that front panel legends will vary according to product.

LED	State	Meaning
Power	On	Unit is powered on and operating normally
	Flashing in sync with another LED	Error on that port.
	Flashing independently	Internal error (such as memory or processing error)
	Off	Mains power is lost
DSL,DSL1 DSL2	On	DSL service established
	Flashing independently at two rates to indicate that the unit is attempting to establish the DSL link: Slow (once a second) Fast (twice a second)	Occurs following an interruption in the power supply and after a break in the DSL service. The unit establishes the link in two stages: <ul style="list-style-type: none">• synchronizing to the network• training to the network.
	Flashing in sync with Power LED	Error on DSL port
	Off	DSL interface disabled
LAN	On	LAN link established
	Flashing in sync with Power LED	Error on LAN port
	Flashing independently	Data transfer
	Off	No network signal detected
WLAN	On	Wireless LAN available
	Off	Wireless LAN unavailable
Voice	On	Voice connections available
	Flashing independently	Call(s) in progress
	Flashing in sync with Power LED	Error on Voice ports
	Off	No voice service

The Rear Panel

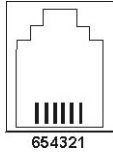
The Connectors

All connectors are located on the rear of the unit. Connectors will vary according to product type.

Power Molex Mini-Fit socket.

DSL For connection to your DSL line. RJ11 socket.

DSL1, DSL2

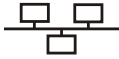


Single DSL products connect using centre pins 3 & 4 of the RJ11 connector.

Dual SHDSL uses the centre pair of the RJ11 connector for port 1 (pins 3 & 4) and the outer centre pair for port 2 (pins 2 & 5).

Service For maintenance of the OmniAccess 5320 BG by a qualified service engineer only.

Unauthorised use of this port may damage the product and invalidate your warranty.



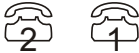
LAN for connection either to a single PC or to your Local Area Network (LAN) via an Ethernet hub/router. Supports 10/100Base-T networks. RJ45 socket.



USB USB A-type socket. Do not connect any equipment to this port unless directed to do so by your network provider



Voice ports for connection to your telephone equipment (telephone/telephone extensions/fax). Socket types:



• BRI ports - RJ45  (8 connection pins)

• POTS ports - RJ11  (6 connection pins)

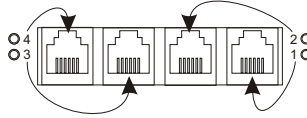
120R RJ45 connection to your 120R Primary Rate ISDN service.

• PRI ports - RJ45  (8 connection pins)

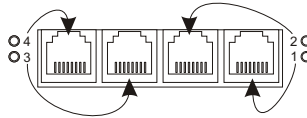
The Rear Panel LEDs: POTS & BRI

The LEDs located adjacent to the block of **Voice** ports are numbered sequentially from the right.

On POTS ports, the LEDs glow to indicate off-hook.



On BRI ports, the LEDs glow to indicate activation of ISDN Layer 1.



The Rear Panel LEDs: PRI

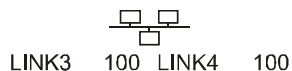
The Primary Rate LEDs illuminate whilst the Business Gateway is starting up.

Once the Business Gateway has completed the boot sequence, an illuminated LED indicates a signal or service error, or a problem with configuration. If a problem occurs, refer to the Primary Rate section of troubleshooting guide.

<u>LED</u>	<u>State</u>	<u>Meaning</u>
RAI	On	Remote Alarm Indicate: Loss of Frame Alignment
AIS	On	Alarm Indicate Signal: Loss of service
NMFAS	On	No Multi-Frame Alignment Signal: Loss of multi-frame alignment in CRC4 mode.
LOS	On	Loss Of Signal: Complete loss of signal

The Rear Panel LEDs: LAN

Products which have multiple LAN ports are fitted with LED's.



<u>LED</u>	<u>State</u>	<u>Meaning</u>
LINK	On	LAN connection established
LINK	Off	No LAN connection established
LINK	Flashing	Data activity on LAN port
100	On	100 BaseT connection
100	Off	10 BaseT connection (where Link is on or flashing)

Preliminary Checks

Please ensure that you have the required equipment.

The packaging

The OmniAccess 5320 BG packaging contains the following items:

- the OmniAccess 5320 BG unit
- a mains power adaptor
- a power cord
- this User's Guide

The accessory pack from your service provider

Some of the following items may be provided for use with the OmniAccess 5320 BG:

- an Ethernet cable
- a DSL interface cable
- converters for the different types of telephone equipment that you have on your premises
- additional installation instructions
- port numbering plan

Required Equipment

You must have the following equipment to use the OmniAccess 5320 BG:

- a DSL line that has been installed by your DSL service provider or the provider's agent. The line will be terminated at a DSL network termination point.

Installing the OmniAccess 5320 Business Gateway

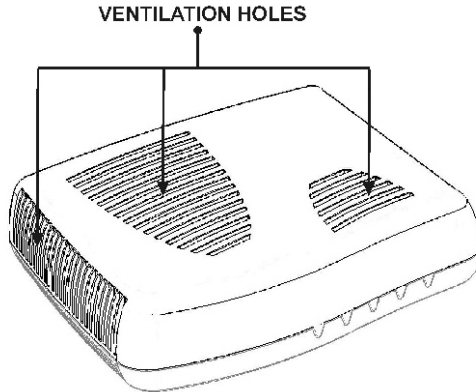
1 Choosing a suitable location

The OmniAccess 5320 BG must be installed within 2 metres of a dedicated mains power outlet.

Do not place the unit close to a heat source (such as other electrical equipment) or in direct sunlight.

Avoid locations exposed to heavy soiling due to exhaust from machinery, airborne particles from industrial processes or excessive dust.

Important! To ensure adequate airflow through the unit, please ensure that the ventilation holes are unobstructed at all times.



2 Connecting the telephone service

Your telecommunications equipment can be plugged into the **Voice** ports either directly or via a suitable converter. This depends on the OmniAccess 5320 BG model and the type of equipment on your premises. If there is any doubt, contact your service provider.

2.1 BRI Ports when in NT mode, are classified as SELV (Safe Extra Low Voltage). As such these ports must not be connected to a TNV (Telecom Network Voltage) network. For example the BRI ports when in NT mode must not be connected to a port with wiring that is either directly or indirectly external to the building.

- 2.2 When configured in NT mode the BRI ports must not be connected to another NT mode port, this includes other ISDN network terminating equipment (ISDN lines delivered by other providers). The action of connecting an NT configured port to an NT port may cause damage to both pieces of equipment.
- 2.3 The BRI Ports, when in TE mode, are classified as TNV-1 and as such may be connected to TNV-1 ports with wiring that is external to the building.
- 2.4 The PRI Ports are TNV-1 rated and as such may be connected to TNV-1 ports with wiring that is external to the building.

However the PRI Ports have secondary over-voltage protection only.

As such, it is recommended that PRI ports be connected to a port with Primary over-voltage protection if connected to TNV-1 ports with wiring that is external to the building.

3 Connecting your LAN

- 3.1 Using an Ethernet cable, connect the **LAN** port on the OmniAccess 5320 BG to a port on your network hub.

4 Connecting the DSL Line

- 4.1 Using a DSL cable, connect the **DSL** port on the OmniAccess 5320 BG to the DSL network termination point
- 4.2 The DSL Port(s) are rated TNV-3 and as such may be connected to TNV-3 ports with wiring that is external to the building.

However the DSL Port(s) have secondary over-voltage protection only.

As such, it is recommended that DSL ports be connected to a port with Primary over-voltage protection if connected to TNV-3 ports with wiring that is external to the building.

5 Connecting power

- 5.1 Plug the OmniAccess 5320 BG into the mains using the supplied mains power adaptor.

Warning! Only use the mains power adaptor provided. Use of the OmniAccess 5320 BG with any other mains power adaptor may damage the unit and may invalidate its warranty and approval.

- 5.2 If necessary, switch power on at the mains socket.

6 Checking that the OmniAccess 5320 BG is operational

- 6.1 Observe the LEDs as the OmniAccess 5320 BG performs its initialization procedure followed by establishment of services. The sequence of lights and available services will vary according to product.

- 6.1.1 When the unit is powered on All front panel LED's glow solidly for approximately 30 seconds.
- 6.1.3 After this all of the LED's will turn off with the exception of the Power light, which will flash a few times before glowing solid. This indicates that the product has booted. The DSL, LAN and Voice services will now initialise.
- 6.1.2 The **LAN** LED will glow steadily once the service has initialised. The LED will flash to show data activity.
- 6.1.4 The OmniAccess 5320 BG establishes the DSL link in a two-stage process:
 - synchronization, during which time the **DSL** LED flashes once a second (slow)
 - training, during which the **DSL** LED flashes twice a second (fast)
- 6.1.5 When the link is established, the **DSL** LED goes steady.
If the **DSL** LED continues to flash, please check the rate at which it is flashing (fast or slow) and contact your service provider.
- 6.1.6 The **Voice** LED lights up and glows steadily when the voice service is ready for use.

7 Using your DSL Service

Important! Alternative arrangements should be made to enable you to contact the emergency services during a power failure or failure of the DSL service.

- 7.1 Follow the instructions supplied by your service provider.

De-installing the OmniAccess 5320 BG

If you need to de-install the OmniAccess 5320 BG in order to relocate it, for example, proceed as follows:

- 1 Disconnect all telecommunications lines.
- 2 Disconnect the power supply.

Troubleshooting

Loss of Service

Important! Alternative arrangements should be made to enable you to contact the emergency services during a power failure or failure of the DSL service.

You may experience loss of service for a number of reasons: loss of power, a DSL line problem or a connectivity problem on your premises.

You should investigate each of these causes in the order in which they are listed in the following sections.

Power Problem?

Examine the **Power LED**.

Power LED status	Action to be taken
On steady	Go on to investigate a possible DSL Line Problem .
Flashing	Please make a note of which other LED is flashing and then contact your service provider.
Off	<ol style="list-style-type: none">1 Check that the power lead from the adaptor is securely located at the unit, and that the adaptor is plugged into the mains socket.2 Check that power is available at the socket.3 If the mains plug is fused, check the fuse.4 Power cycle the unit. <p>If the Power LED is still off, please contact your service provider.</p>

DSL Line Problem?

Examine the **DSL LED**.

DSL LED status	Action to be taken
On steady	If your telephone calls are failing, go on to investigate a Voice Problem . If you are experiencing Internet access problems, go on to investigate a LAN Problem .
Flashing independently	There has been an interruption in the power supply or a break in the DSL service. After a short while, the LED should change from fast flashing to steady. If the LED continues to flash, check the rate at which it is flashing (fast or slow) and contact your service provider.
Off	Please contact your service provider.

Voice Problem?

Examine the **Voice LED**.

Voice LED status	Action to be taken
On	Check the cable connections between the OmniAccess 5320 BG and your telecommunications equipment. If all cables are secure, proceed as follows. <u>Where telephones are plugged directly into the OmniAccess 5320 BG</u> If you do not hear the dial tone when you go off-hook, please contact your service provider. <u>Where call connection is via a PBX</u> If the PBX connection with the OmniAccess 5320 BG is PRI (Primary Rate Interface) or BRI (Basic Rate ISDN), please contact your PBX service engineer. If the PBX connection with the OmniAccess 5320 BG is analogue (POTS): <ol style="list-style-type: none">1 Unplug the PBX from the OmniAccess 5320 BG.2 Plug a telephone directly into a Voice port.3 Go off-hook.4 If you hear the dial tone, contact your PBX service engineer.5 If you do not hear the dial tone, contact your service provider.
Off	Please contact your service provider.

Primary Rate Problem?

Examine the **Rear Panel Primary Rate LEDs**.

LED status	Action to be taken
RAI= On AIS= On NMFAS= On LOS= On	<ol style="list-style-type: none"> 1 Ensure that the product has a valid configuration and the boot sequence has completed. 2 Ensure that the Voice protocol is running. 3 If 1 & 2 have been completed successfully and the LED's are still illuminated, contact your equipment provider.
RAI= On AIS=Off NMFAS=Off LOS=Off	<p>Remote Alarm Indicate: Loss of Frame Alignment</p> <ol style="list-style-type: none"> 1 Ensure system clocking is configured correctly 2 If the problem persists contact your service provider.
RAI=Off AIS= On NMFAS=Off LOS=Off	<p>Alarm Indicate Signal: Loss of service</p> <p>Contact your service provider.</p>
RAI=Off AIS=Off NMFAS= On LOS=Off	<p>No Multi-Frame Alignment Signal:</p> <p>Loss of multi-frame alignment in CRC4 mode.</p> <ol style="list-style-type: none"> 1 Ensure system clocking is configured correctly 2 Ensure CRC4 Multiframeing is enabled at both ends of the connection 3 If the problem persists contact your service provider.
RAI=Off AIS=Off NMFAS=Off LOS= On	<p>Loss Of Signal: Complete loss of signal</p> <ol style="list-style-type: none"> 1 Ensure PRI cabling and connector pin-out is correct 2 If the problem persists contact your service provider.

LAN Problem?

Examine the LAN LED.

LAN LED status	Action to be taken
On	Check the integrity of your network. If you still have no service, please contact your service provider.
Off	Check that the network cable is plugged into the LAN port. If the cable is secure at both ends of the link and is of the correct type, please contact your service provider.

Declaration of Conformity

We: **Dataflex Design Communications Limited**

Connect House
Kingston Road
Leatherhead, Surrey
KT22 7LT, UK

declare under sole responsibility that the product

ViNE2000 Branded for Marketing 'OmniAccess 5320'

to which this declaration relates, is compliant with the essential requirements of

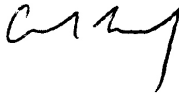
R&TTE Directive 1999/5/EC of 9 March 1999

RoHS Directive 2002/95/EC of 27 January 2003

WEEE Directive 2002/96/EC of 27 January 2003

and that the following harmonized standards have been applied:

EN 60950-1:2006
EN 55022: 2006
EN 61000-3-2:2006
EN 61000-6-1:2007
EN 61000-6-3:2007
EN 55024: 1998



Signed
Name	G S Bathija
Position	Managing Director
Place and date of issue	Leatherhead, March 2008
Year of affixing CE mark	2008