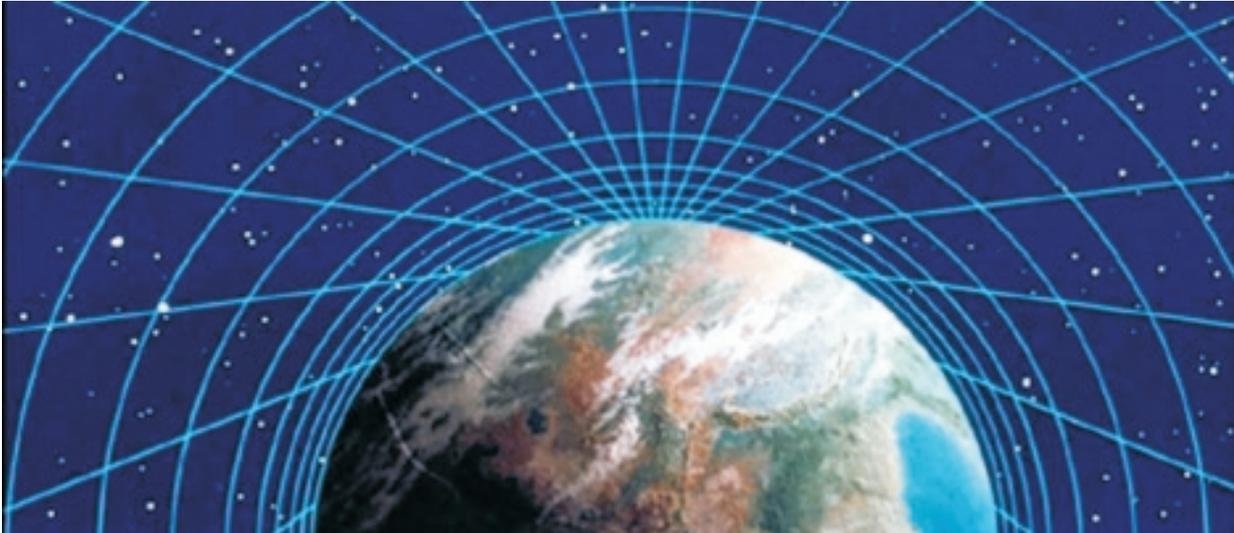


Campersat satellite internet option



Exclusive to Campersat customers, our internet option features high speed download via satellite and generous data limits without the hassle of long term contracts. You get a dedicated digital data satellite receiver, a permanent IP address, dial up access via mobile or landline, and software to suit Windows 95 – 98, NT, 2000 or XP.

Introduction

Cost effective mobile internet access is here, offering high speed satellite internet to the wandering traveller. Satellite internet brings you lightning fast web browsing with high speed streaming audio and video dramatically reducing download times. You have access via local call or mobile phone, and our systems are compatible with home and office networks. Because we provide both mobile and conventional land line dial-up access, you can use your dual access even at times when you don't need the satellite at all – so you always have access to your account, whether you are on the road or at home.

How satellite internet works

Using your laptop or PC, you log in, via modem, to your 'POP'. As a Campersat customer, you will have a special 'return address' via satellite. Your download comes in through your digital data satellite decoder/receiver, which is in turn connected to your laptop or PC.

The Campersat Satellite internet service is a high-bandwidth internet connection service, based on a satellite dish and digital data satellite receiver (USB or Ethernet unit). This allows you to connect to the internet at up to 256kbps which is easily faster than the fastest analogue 56Kbs modem or ISDN. The technology is well proven, and has been in operation since late 1997.

The satellite

The service is delivered from Panamsat's PAS 8 satellite. Customers must have clear line of sight to the northern sky. Angles of elevation and direction will vary depending on where you settle for the night. Satellite signals do not pass through trees or other solid objects such as buildings. Very heavy rain, or thunderstorm activity weather may affect satellite performance.

What you need to get started

-A laptop or PC with a USB or network port for Campersat USB Option

-A mobile phone with suitable connection to computer

The service, equipment and costs

With the Campersat Satellite internet service, we provide you with the following:

A dedicated USB or Ethernet network digital data satellite receiver, suitable for internet downloading; software suitable for Windows 95/98, Windows NT, Windows 2000 or Windows XP; satellite cable, power divider and connectors - \$1025

A permanent IP address from our satellite receiver and ISP access via mobile or land line - \$89 per month (no contracts).

Flexibility to change your dial up arrangements when you aren't travelling - \$25 (administration fee)

Generous 2Gb data limit per calendar month – free!

Installation information

Use of your satellite dish

As your internet download comes from Panamsat's PAS8, you will be trimming your dish differently to receive this service. The elevation, direction and polarisation for your dish will be slightly different than for your free to air television and radio services, which comes from the C1 satellite.

TV or internet

As the services come from different satellites, your usage will be limited to one service at a time.

Computer hardware

The main component to install your satellite internet system is the USB or Ethernet digital data satellite receiver box which is easy to plug in and install. It should sit somewhere convenient near your computer.

Computer software

A step by step set up procedure is included in your installation procedures outlining all amendments required to your computer settings.

About mobile technologies

These notes are provided as a guide for you only. For specific product advice you'll need to see your computer or telecommunications supplier.

Telecommunications engineers have so far come up with four generations of mobile phone technology. In brief these are:

First generation (1G):

The original analog system which allowed voice only.

Second generation (2G):

In Australia we use two such technologies, GSM and CDMA, which allow voice and limited data such as text messages. In general the data speeds are far too slow for internet, however coupled with satellite downlink they can provide good performance for web surfing.

Faster 2G technology – GPRS (General Packet Radio Service)

Companies such as Telstra, Optus and Vodafone have this faster, 2G technology called GPRS. This is sometimes called "Two-and-a half G" because it theoretically offers data speeds three times as fast as a typical desktop modem. In practice, however, GPRS has been much slower than expected. Also, data transmission costs are very high compared with current traditional transmissions. This is because they are based on a cost per Kb downloaded, rather than a fee per minute. So, even with the temptation of virtually unlimited connect time, consumers should be very conscious of their data needs. For example the Campersat download connection cap of 2Gb per month would cost upwards of \$15,000 if carried over GPRS.

Third Generation (3G):

This is the first mobile phone system specifically designed for data. It offers higher-quality voice and data speeds equal to a cable modem or office network connection. In theory, 3G phones with in-built cameras are able to handle video phone calls. In practice, however, this could be prohibitively expensive.

Fourth Generation (4G):

This technology has data speeds 260 times faster than 3G, allowing a mobile phone to display extremely high-quality video equal to that of high definition television. There are no firm plans for the introduction of 4G networks.



Glossary of terms

POP

Two commonly used meanings: Point of Presence and Post Office Protocol. A Point of Presence usually means a city or location where a network can be connected to, often with dial up phone lines. So if an internet company says they will soon have a POP in Belgrade, it means that they will soon have a local phone number in Belgrade and/or a place where leased lines can connect to their network. A second meaning, Post Office Protocol refers to the way e-mail software gets mail from a mail server. It is this POP account that you tell your e-mail software to get your mail from.

ISP

Internet Service Provider - An institution that provides access to the internet in some form, usually for money.

PCI

Peripheral Component Interconnect is an interconnection system between a microprocessor and attached devices in which expansion slots are spaced closely for high speed operation.

Broadband

Wide bandwidth connection which allows high speed data flow.

Streaming audio

Audio is digital and broadband allows live audio to be transmitted without interruption

Download

Retrieval of data from internet.

MP3

New audio standard for storage and transmission of music. Lower quality than standard CD, however, allows for significantly more data to be transmitted.

Dual access

This feature allows you to select your internet download to be delivered via mobile or land line.

LAN

Local Area Network

A computer network limited to the immediate area, usually the same building or floor of a building.

Bandwidth

How much "stuff" you can send through a connection. Usually measured in bits-per-second. A full page of English text is about 16,000 bits.

A fast modem can move about 15,000 bits in one second. Full-motion full-screen video would require roughly 10,000,000 bits-per-second, depending on compression.

Kbps

(Kilo Bits-Per-Second)

A measurement of how fast data is moved from one place to another. A 28.8 modem can move 28,800 bits per second.

Gigabyte

Usually refers to 1000 megabytes.

Modem

MOdulator, DEModulator - A device that you connect to your computer and to a phone line, that allows the computer to talk to other computers through the phone system. Basically, a modem does for computers what a telephone does for humans.

Backbone

A high-speed line or series of connections that forms a major pathway within a network. The term is relative as a backbone in a small network is likely to be much smaller than many non-backbone lines in a large network.

USB

PortUniversal Serial Bus. The serial port on a personal computer is where a modem would be connected. USB provides a much faster connection than the Serial Port which is not fast enough to support an internet connection.

Network Port

Generally a place where information goes into or out of a computer, or both. E.g. the serial port on a personal computer is where a modem would be connected.

Digital data satellite receiver

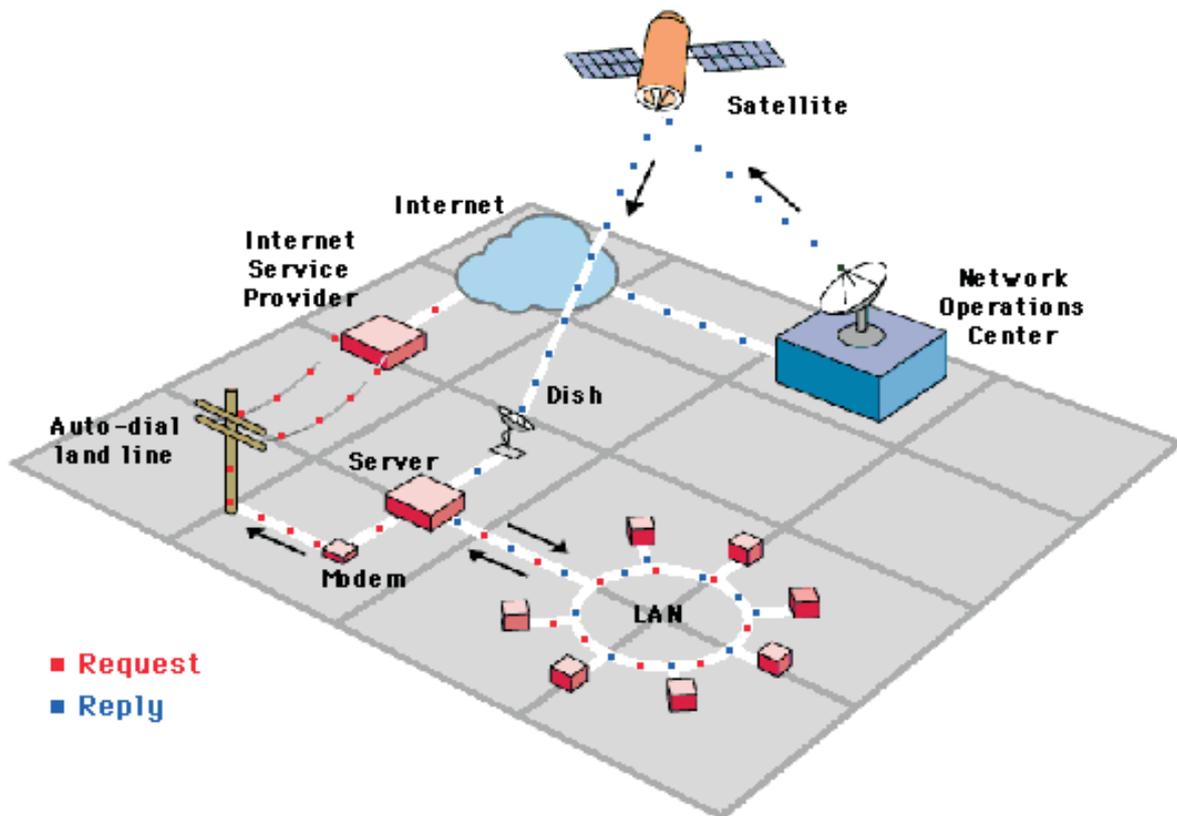
Satellite receiver used to convert the signal from the LNB into language that can be used by your computer.

Polarisation adjustments

Rotation of the LNBF.

LNBF

Piece of electronics above the satellite dish converting signal from the satellite and sending it to the satellite receiver.



Frequently asked questions

Is satellite internet available Australia wide?

No. You must be in a mobile phone service area or have access to a landline phone connection.

Is the Campersat Satellite internet option available as a stand alone product without the TV & radio?

Yes. Contact our staff to discuss your needs further.

What sort of mobile phone is suitable?

Your mobile phone needs a data connection and suitable software to connect to your computer. Contact your computer and telecommunications supplier.

Do the television and internet services come from the same satellite?

No. Both services are on separate satellites which means that you cannot watch television or listen to the radio and use the internet at the same time. Separate guides are provided for finding the satellite.

Does the phone need to have a built-in modem or is a mobile connected to a separate modem suitable?

Either option will work fine with our satellite equipment, however, for specific product information, discuss your needs with a computer or telecommunications supplier.

Which ISP is used for the internet connection?

Videosat provides internet connection and hardware configuration and works with major internet companies to ensure complete system solutions.