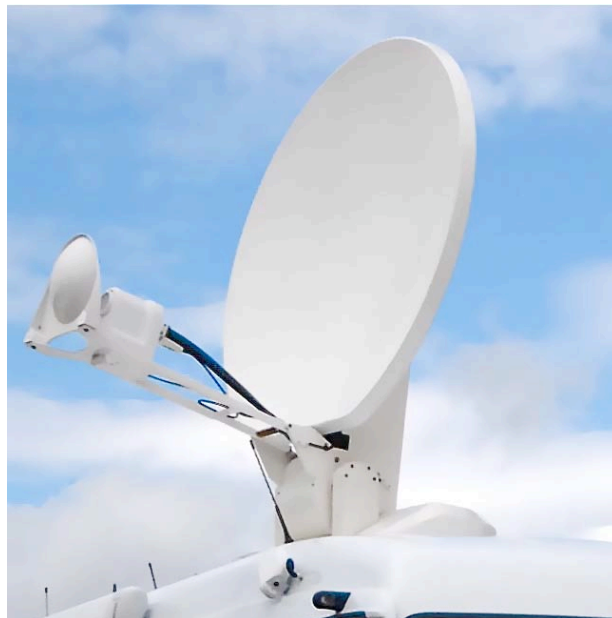
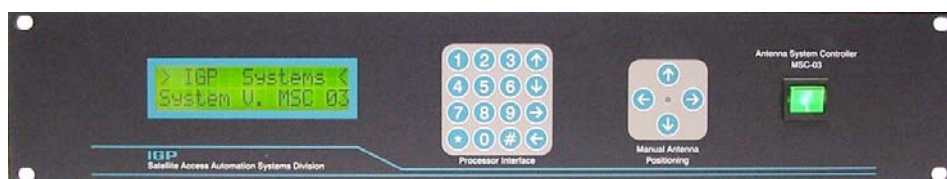


## VPS-III™ - Automatic Satellite Transmission System

**The Virtual Private Satellite™ (VPS™) antenna system is the only vehicle mounted SNG system available today that will automatically acquire the satellite, and optimize pointing as well as polarization with higher precision than can be achieved manually. It is because of this that it cannot only be used for automatic pointing but also for automatic line-up together with other patented features that IGP has developed.**



**The system is fully compatible with the VPS™ automated space segment management system, although the system is superior on traditionally operated satellites and space segment as well. With an outdoor system weight of approximately 100 kg, including a high-efficiency 44 dBi gain Gregorian Offset Antenna, will fit on most standard roof racks available for vans and trucks. The system controller is equipped with everything inside to accurately set up the system**



## Main Features

- Acquires position of earth station by means of GPS, precise angle measurement devices, electronic compass and a digital tracking carrier receiver. This technology provides absolute proof of acquisition of the right satellite, unlike analog beacon tracking, since many satellites share the same beacon frequency.
- Fully automatic polarization setting.
- Fully automatic frequency assignment and destination selection when used on VPS™ Automated Satellites
- No need to park car level.
- RF package options ranging from 49 to 70 dBW EIRP with redundancy.
- 64 kbps to 40 Mbps DVB and IP versions with- or without returnchannel available.
- Approved for use by Intelsat, Eutelsat, SES-astra and Loral.
- Step tracking mode for inclined orbit satellites
- Very high antenna performance
- Fully designed to withstand adverse conditions without use of cover
- Cover available with high-gain diversity antennas laminated in fiberglass for two mobile microphones, two cellphones, wireless intercom and WiFi.

## Automatic IP connection between vehicle and studio within 2 minutes

In the IP variety of VPS™, systems may operate in a one-way (multicasting) mode or two-way mode. One or two modems may be used to accommodate a low bitrate at any time during the deployment of the system, allowing telephone lines to be open at all time, with telephone numbers on the remote site to be programmed as extensions of the PBX of the studio.

Depending of the satellite used and amplifiers installed, the system may accommodate various services, i.e. audio, video and file transfer.

MPEG 4 IP codecs can be used for either or both video and audio transmission. The codecs will support in uni- and multicasting in linear, MPEG 2 and MPEG 4 in all usual bitrates.

The MPEG 4 video codecs currently support all usual bitrates and will be expanded to carry HDTV bitrates.

The telephone codecs are compliant with current PBX card VoIP standards and may therefore directly interface with available PBX extension cards.

The entire system does not require more than 7 units of rackspace for non-redundant systems.

As a result flexibility and price/performance ratios are brought to a level that allows satellite contribution and communications to be applied on a wider scale and in a more effective way.

## DVB-S2

VPS may also be supplied as a hybrid, with IP and DVB-S2 capability, or as DVB-S2 only. DVB-S2 systems are backwards-compatible with DVB-S.

## Specifications VPS-III

### INPUT SPECIFICATION

Frequency range TX:	13,75 – 14,5 GHz
Frequency range RX	10,75 – 12,8 GHz
Downconversion:	to L-band, through single or multiband PLL
Effective Aperture:	135 x 120 cm

Receive Gain:	42,8 dB
Output Power:	48 – 68 dBW, according to configuraiton
Crosspolar -1dB Contour:	> 35 dB
VSWR:	1,2
Half Power Beamwidth	1,2°
G/T	23,1 dB/K
Positioning:	Automatic, through IP or DVB carrier with unique pattern
Included accessories	GPS, Tracking receiver, Electronic Compass, Two Panic Buttons
User Interface:	Keypad or hub
LCD read-out for:	Calculated satellite position Elevation of antenna $\pm 0,05^\circ$ Azimuth Loss of link Activated Panic Button Polarization $\pm 0,5^\circ$
Manual control:	Via controller motorized or with provided wrench in case of power failure
Power requirement:	110 – 240 Volts – 3A through indoor unit
Indoor System weight:	5 Kgs
Outdoor System weight:	100 Kgs excluding RF equipment
Outdoor environment:	100% moist, must operate in rain, snow, dust and salt air -40 to + 55° Celsius
Indoor environment:	Humidity 5 to 95%, non-condensing, Temperature -10 - + 45° C.
Maximum Windloading:	120 KMH deployed, 200 KMH stowed

See separate technical bulletins for IP system, DVB-S2 equipment as well as vehicle integration packages

*VPS is also available in a 1 meter fly-away version*

