BROADCAST SOLUTIONS
EXPERTS IN WIRELESS TRANSMISSIONS
www.svpbm.com
SVP Broadcast Microwave is a company engaged in the design and manufacture of Microwave radio links for global live productions with a large trajectory and experience. This company was founded in 1992 in Spain and currently has its products operating in more than 50 countries.

The equipment and systems from SVP are being used by TV stations and broadcast companies all around the world. SVP has been established as a competitive company in the international market for over 25 years.

SVP is a company which dedicates a lot of its resources to be in the front line of technology and attend to new challenges, this has been achieved with an excellent R&D department. The main objective of our company is to continuously improve the design of our own equipment, so that SVP can offer its clients the best solution and satisfy their current and future necessities.

SVP also believes in the importance of the customer. The reason why we created a customer service department is to offer both personalized and post-sale service. Our clients believe in SVP professionals as they know we will always support them to make the best decision and help them with any installation and operation problems that may appear.
TECHNOLOGY

- Wireless Cameras
- Airborne Systems
- Point to Point Portable Systems
- Central Receive Sites
- Satellite Communications

BENEFITS

- High Quality and Low Latence content
- Equipment Versatility
- Continual Innovation
- Newest Technology
- System Innovation Capabilities
- Excellent after sell service

APPLICATIONS

- Live Sports Coverage
- News Broadcasting
- Aerial Filming
- Central Receive Systems
- Satellite News Gathering
- On-Board Applications
- UAV/ Drones
SVP Broadcast Microwave’s camera links are the best solution for live transmission of news, sport events, field and studio productions.

Professionals rely on SVP’s technology as it has always had an excellent performance on field. SVP’s Camera link system offers an ultra low delay with full broadcast 4K performance.

We offer solutions for 4K video transmissions with H.265, H.264 and Mpeg-2 encoder and for HD transmissions with H.264 high quality encoders.

In the receiver site, we use diversity receivers together with individual sectors or multisector antennas developed by SVP.

BENEFITS

In transmission, SVP offers 4K and HD camera transmitters. All our transmitters perform DVB-T, DVB-T2, DVB-S and DVB-S2 modulations. It allows simultaneous terrestrial and satellite transmission and the ultra-wide frequency band is from 1.0 to 8.0 GHz for 4K H.265 system and from 1.0 to 6.4 GHz for HD H.264 systems, allowing the operation in many countries all around the world with one unique equipment.

In the reception side, our receivers integrate COFDM demodulation and spatial diversity based on MRC (Maximum Ratio Combining) technique, which reduces the effects of multipath and fading losses. The receivers are designed to perform DVB-T2, DVB-T and ISDB-T demodulation and H.264 and Mpeg-2 decoding. It is also possible to upgrade the receiver to perform H.265 decoding.

In reception we obtain several outputs: analogue video, Transport Stream over IP, 3G/SD/HD-SDI and HDMI outputs. It offers the received signal in all the outputs simultaneously.

ASI and Transport Stream over IP inputs enable its use as a standalone decoder and the ASI and the Transport Stream over IP outputs enable its use as a demodulator.
> MAIN FEATURES

- Ultra Wide RF: 1 to 8 GHz
- Terrestrial and satellite transmission
- 4K Highest video quality
- Bidirectional camera control
- Intercom
- H.265, H.264 and Mpeg-2 encoding
- BISS-1, BISS-E AES-128 and AES-256 encryptions

TRANSMITTER SYSTEM

RECEIVER SYSTEM
AIRCRAFT DOWNLINK SYSTEM

SVP Broadcast Microwave's 4k Digital Helicopter Data-Link system has been optimized to be used in applications of sport events, news, parades, and aerial surveillance.

In the helicopter a simple configuration is used: a high power transmitter, an airborne 4K codec, a remote control and an omnidirectional antenna.

In the receiver site, diversity 8 receiver is used together with a multisector antenna and the airborne 4k codec.

BENEFITS

In transmission, the new high power transmitter developed by SVP Broadcast Microwave which is an excellent, reliable and comfortable solution for a wide variety of applications.

This device performs DVB-T and DVB-T2 modulation and H.264 – 4:2:2 encoding for HD and SD signals. It is available in different frequency bands. It can be used in combination with the Airborne codec to make the upgrade to 4K, H265 encoding, or to enable the transmission of up to 5 HD signals.

Thanks to these features, it expands the possibilities of COFDM digital links on the market using linearization technology to minimize distortion and providing superior signal quality for complex multicarrier modulations.

Control, operation and monitoring of the transmitter is very user friendly. All the parameters can be configured in field. A wide range of accessories allow to use this equipment in many different applications.

It is especially designed for audio-visual broadcasting and surveillance applications where KLV metadata monitoring is needed.

In reception, the diversity receiver can be used in combination with a multisector antenna or a parabolic antenna with a tracking system for long distances. The tracking of the helicopter is made based on the GPS position of the helicopter.
> MAIN FEATURES

- Up to 5 videos simultaneous transmission
- Auxiliary RF output to external PA
- AES-128 and AES-256 encryption
- KLV metadata embedded on SDI
- High linearity
- Power supply range: 12-36 VDC
- Isolator for protection against high VSWR
PTP PORTABLE SYSTEM

SVP Broadcast Microwave’s renewed portable HD transmitters and receivers have been designed to be used in broadcast and security applications.

They can work in most demanding environmental conditions. Field tests have proven their outstanding RF performance.

PtP portable systems are compact and sturdy for transportation, quick and easy to install, very reliable in operation and easy to configure.

It is capable of terrestrial and satellite transmissions.

BENEFITS

The portable transmitter designed by SVP Broadcast Microwave is a split box portable microwave transmitter, which consists of a control unit and a RF head connected by triax cable.

The transmitter features H.264 – 4:2:2 encoding for HD and SD signals. It is based on NTT encoding technology to offer the highest video quality with a minimum latency of 33ms.

This portable transmitter performs DVB-T, DVB-T2, DVB-S and DVB-S2 modulations. An L band IF output is available which enables the user to use the transmitter as a satellite encoder and modulator unit. The transmitter also has an auxiliar RF output.

The reliability and exceptional RF and IF performance make this portable system suitable for: point to point links, DNSG, high performance Encoder and operation in different countries.

The Portable Link System is available in different frequency bands from 1.3 to 10.5GHz.

This portable system can be used in the following configurations; bidirectional radio link, 1+1 configuration, or twin 1+0, thanks to the SCDA duplexer developed by SVP Broadcast Microwave.

High power compact portable transmitter is also available.
> MAIN FEATURES

- Frequency bands: 2 GHz, 4GHz, 6 GHz, 7 GHz and 10 GHz.
- BISS-1, BISS-E, AES 128 and AES 256 encryptions
- Terrestrial and Satellite transmission.
- High definition video quality: 1080p/50, 1080p/60, 3G-SDI.
- Lowest Delay in H.264: 33 ms.
- ASI Over IP Input/Output
- L Band and RF output in control unit
Terrestrial microwave links, and particularly, central receive systems are being used as an interesting cost-effective alternative to satellite new gathering (SNG), when working in urban areas. SVP Broadcast Microwave customers are taking advantage of this solution with great satisfaction.

There are two types of receiving equipment:

**CENTRAL RECEIVE SITES**

Mid range antenna systems with no need of steerable system.

It uses panel antennas to provide 360 degrees coverage with high gain.

Very long ranges are achieved when used with parabolic directional antennas mounted in a GPS based tracking system.

**FIXED MOBILE RECEIVING SITE**

Allows the user to receive and visualize the signals directly from the aircraft on a big portable screen.

The connection of the receiver to a computer for monitoring of the KLV Metadata is also possible.
> MAIN FEATURES

- 24/7 availability
- Wide coverage area
- Simultaneous reception of different transmissions
- Aircraft signal reception
- Easy configuration, non-technical staff required
- Remote control software
- No dependence on 3G operators

CENTRAL RECEPTION SYSTEM

PORTABLE RECEIVER
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## SPORTS

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This graph shows the differences between several systems which are employing different transmission standards and the advantages of DVB-T2 over DVB-T and ISDB-T.

As shown, the results in DVB-T2 are much better than in other standards with the closest results to the Shannon limit.

SVP Broadcast Microwave employs DVB-T2 obtaining effective and reliable results and offering the clients the best solution possible.