



## Low power – high benefit

UHF Low-Power DTV Transmitter Family R&S SV7000



**ROHDE & SCHWARZ**

## Optimize your digital TV network

As the operator of a digital TV transmitter network, your goal is to strike the optimum balance between economic viability and coverage quality. Our innovative low-power transmitters of the R&S SV7000 family provide you with the means to meet these opposing demands using sophisticated technology. Together with the R&S NV7000 and R&S NV7001 transmitter families, which are successfully implemented all over the world, we now offer you an incrementally scalable and comprehensive modular transmitter system with low- to maximum-power models enabling every conceivable network configuration.

The new transmitters of the R&S SV7000 series for DVB-T and ATSC with output power ranging from 10 W to 200 W are particularly ideal for the following purposes:

- ◆ Covering regions not reached by the main transmitter, e.g. valleys
- ◆ Improving indoor reception if the power of the main transmitter is not sufficient
- ◆ Increasing network density to allow mobile reception
- ◆ Setting up small-cell structures for datacasting applications

## Unrivalled compactness with high-power technology

The R&S SV7000 models transfer the innovative high-power technology concept to the low-power range, thus providing transmitters of unprecedented compactness, operating stability and logistic simplicity. In addition, these transmitters seamlessly integrate into the remote monitoring, remote control and maintenance system of a modern transmitter network.

Various amplifier modules are available to achieve the required output power. All are characterized by compact design, LDMOS transistor technology, low noise and a high level of temperature and frequency stability (see overview on page 4).

## Practically plug & play

It has never been easier to set up a TV transmitter and put it into operation than now with the R&S SV7000 system. All components can be supplied in separate desktop housings that can be quickly stacked on top of each other and are cabled ready for use. Subsequent extensions or reconfigurations are fast and easy. All components can, of course, be integrated into a rack system.

In its most simple form, an R&S SV7000 transmitter consists only of the new flat R&S SV702 exciter and a power amplifier.

**The new standard in compact transmitter technology: complete 10 W DTV Transmitter R&S SV7010 E.**



Owing to the built-in self-monitoring system and the RF detector in the amplifier, no other components are required to operate a single-transmitter system.

If you need to operate several transmitters within a confined space, possibly even with standby components, the compact design of the R&S SV7000 is particularly beneficial. For example, a complete two-transmitter system with 10 W each and only six height units can be implemented (see configuration overview on page 4).

The new R&S NetCCU module, which is just one unit in height, controls the transmitter in case of standby configurations. It also enables remote control and monitoring of the transmitter via Internet (TCP/IP) or SNMP network.

### Benefit from the know-how of the market leader

Our sales staff will be happy to explain all advantages of the R&S SV7000 series (as well as of the High- and Medium-Power Transmitters R&S NV7000/7001, which have become market standards) based on your specific requirements. Being the market leader in digital TV with numerous installations worldwide, we understand what is important.

### Extremely compact

- ◆ Desktop solution
- ◆ 100 W, 50 W, 20 W transmitters, only five units high
- ◆ 10 W amplifier housed in one half of a 19", two-unit module

### Flexible

- ◆ Several transmitters can be mounted in one rack
- ◆ Modular system for various expandable configurations
- ◆ Optional standby systems such as passive standby or n+1

### Optimum transmission quality

- ◆ Innovative direct modulation with I/Q chip for enhanced quality parameters
- ◆ First-class synthesizer and GPS receiver
- ◆ Class A or AB low-distortion amplifiers

### Reliable

- ◆ Amplifiers with technologies that have also proven very reliable in high-power transmitters
- ◆ Extremely temperature- and shock-resistant exciter components and circuits

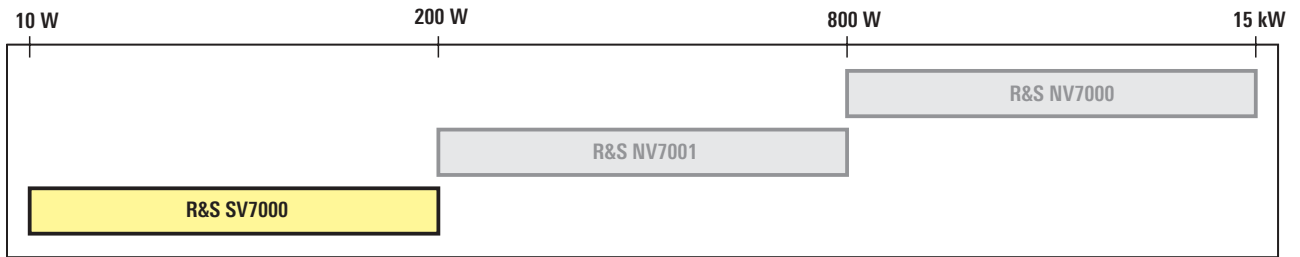
### Easy to use

- ◆ Very easy installation and putting into operation
- ◆ Frequency change without readjustment
- ◆ Minimized maintenance and service requirements

### Continuous monitoring

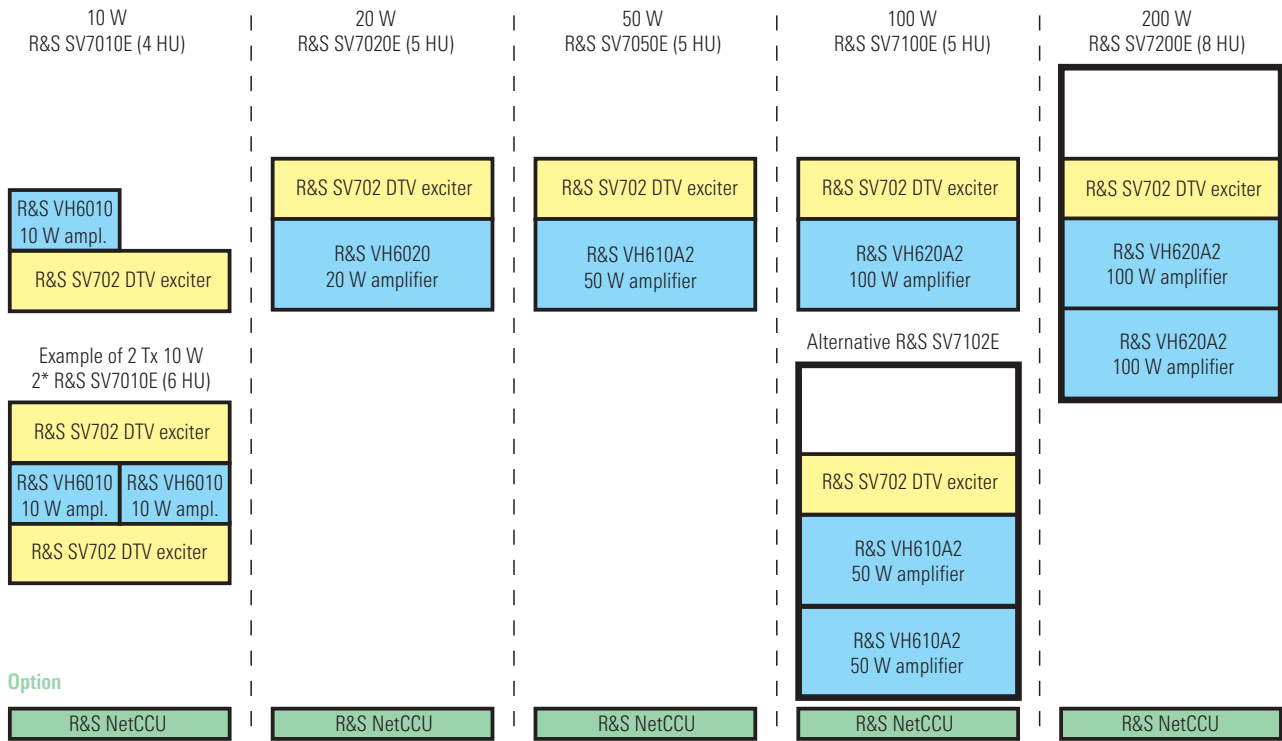
- ◆ Simplified local warning and error indications via LED
- ◆ State-of-the-art remote control via web server or SNMP agent (optional)





The new R&S SV7000 series complements the Rohde & Schwarz product portfolio of digital TV transmitters at the low-power end of the spectrum.

**Overview of all models and components of the R&S SV7000 system.**



(R&S NetCCU: transmitter control unit with display for standby systems and advanced remote control via web server or SNMP agent)

