



- SYSTEM 42 equipment is made up of the portable reporter unit STAR 42, RD42 true diversity receiver and TR42 talkback transmitter.
- It is a **broadcast quality full-duplex communication system**. Portable transmitter works in VHF band, talkback transmitter works in UHF band (possible at others under demand).
- With up 3W output power, the system allows working across wide areas, and it is specially designed to work in aggressive RF environments.
- The system is supplied with all necessary elements to work: antennas and battery for portable unit, antennas and power supply for base (RD42+TR-42) unit, external charger (which allows to charge batteries out and into the portable unit), and other complements.

**Exceptional sturdiness and absolute reliability.**

# SYSTEM 42: STAR 42, RD-42, TR-42

ANALOG FULL-DUPLEX TRANSMISSION & RECEPTION REPORTER SYSTEM

## TECHNICAL SPECIFICATIONS:

### Radio

#### Transmitters

**Uplink Frequency:** VHF, 20 MHz window (other under demand)  
**Downlink Frequency:** UHF, 20 MHz window  
**Number of channels:** 16 digital PLL  
**Modulation:**  $\pm 30$  KHz pre-emphasis 50us  
**Channel selection:** 1 digit hexadecimal encoder, delayed  
**Spurious emissions:**  $< -60$  dBc (portable);  $< -65$  dBc (talkback)  
**Output impedance:** 50 $\Omega$   
**Output power:** Up to 3W (portable);  
Up to 5W (talkback)

#### Receivers

**Uplink Frequency:** VHF, 20 MHz window (other under demand)  
**Downlink Frequency:** UHF, 20 MHz window  
**Number of channels:** 16 digital PLL  
**Modulation:**  $\pm 30$  KHz pre-emphasis 50us  
**Channel selection:** 1 digit hexadecimal encoder, delayed  
**Spurious emissions:**  $< -60$  dBc (portable);  $< -65$  dBc (talkback)  
**Output impedance:** 50 $\Omega$   
**Output power:** Up to 3W (portable);  
Up to 5W (talkback)

### Audio

#### Transmitters

**Audio input:** Balanced Micro/line selectable  
**NR System:** "SILENZO" compressor limiter  
**AF bandwidth:** 50 Hz / 15 KHz  $\pm 0,5$  dB  
**Distortion:**  $< 0,3\%$   
**SNR:**  $> 85$  dB

#### Receivers

**Output portable:** Headphones output 1,5V / 8 $\Omega$   
**Output base:** Balanced 600 $\Omega$  line / headphones front  
**AF bandwidth:** 50 Hz / 15 KHz  $\pm 0,5$  dB  
**Distortion:**  $< 0,3\%$   
**SNR:**  $> 85$  dB (portable)  
 $> 100$ dB (base)

### General

#### STAR-42

**ON/OFF switch Tx & Rx**  
**Separate Rx & Tx channel selector**  
**Audio gain control**  
**Mechanized aluminum enclosure**  
**DSP available on request**  
**Battery status**

**Audio Peak**  
**High capacity Lithium battery 11,2V / 7,8 Ah**  
**Audio connector XLR3 female**  
**Dimensions: 190x59x182 mm**  
**Weight: 2,5 kg (battery included)**

#### RD-42

**ON/OFF switch**  
**Channel encoder control**  
**Monitor volume & squelch**  
**Aluminum enclosure**  
**Power external 12V DC / 0,25A**  
**Indicators RSSI, VU-meter, channel, diversity A/B**

**Audio connector XLR3 male**  
**Power connector XLR4 male**  
  
**Dimensions: 300x145x40mm**  
**Weight: 0,9 kg**

#### TR-42

**ON/OFF switch**  
**Micro/Line switch**  
**Audio gain control**  
**Aluminum enclosure**  
**Power external 12V DC / 2A**  
**Indicators RSSI, VU-meter, channel**

**Audio connector XLR3 female**  
**Power connector XLR4 male**  
  
**Dimensions: 300x145x40mm**  
**Weight: 0,8 kg**

Specifications subject changes without notice.