



SRPT-40A

The SRPT-40A is our most powerful RPU transmitter. The new synthesizer and RF power amp technology was developed for the new composite STL and has been incorporated into the SRPT-40A. Now you can dial the exact frequency for the selected band from the front panel. The SRPT-40A is available in models that cover frequencies from 135 MHz-965 MHz. See chart below for exact bands available.

SRPT-40A Specifications

Frequency Bands and Continuous Duty, Maximum Power Output 50 Ohms ($\pm 10\%$):

Model Number	Frequency Bands	Power
SRPT-40A-150	135-185 MHz	50 Watts @ 135-140 MHz 60 Watts @ 140-180 MHz 40 Watts @ 180-185 MHz
SRPT-40A-230	215-250 MHz	30 Watts @ 215-220 MHz
SRPT-40A-250	235-265 MHz	25 Watts @ 235-245 MHz 30 Watts @ 245-265 MHz
SRPT-40A-330	300-350 MHz	20 Watts @ 300-315 MHz 30 Watts @ 315-350 MHz
SRPT-40A-425	390-440 MHz	50 Watts @ 390-440 MHz
SRPT-40A-450	430-480 MHz	50 Watts @ 430-465 MHz 45 Watts @ 465-480 MHz
SRPT-40A-500	470-520 MHz	45 Watts @ 470-520 MHz
SRPT-40A-850	840-870 MHz	20 Watts @ 840-870 MHz
SRPT-40A-925	900-935 MHz	20 Watts @ 900-935 MHz
SRPT-40A-950	935-965 MHz	20 Watts @ 935-960 MHz 18 Watts @ 960-965 MHz

Special frequencies on request. Allow longer delivery time.
Check with MARTI Sales for availability.

Frequency Selection: Fully frequency agile over the entire band selected. (See chart above) Frequency can be selected within 5 and 6.25 kHz steps for 480 MHz and below, or 10 and 12.5 kHz steps for above 480 MHz.

Frequency Stability: -10°C to $+45^{\circ}\text{C}$ $\pm 0.0001\%$.

Frequency Agility and Accuracy: An executed "dialed-in" frequency that operates within model frequency range will have an accuracy within:

SRPT-40A models 150 to 450:

- $\pm .00004\%$ for frequencies divisible by 5 or 6.25 kHz,
- $\pm .00015\%$ for MOST frequencies NOT divisible by 5 or 6.25 kHz*.

SRPT-40A model 950:

- $\pm .00004\%$ for frequencies divisible by 10 or 12.5 kHz,
- $\pm .00015\%$ for MOST frequencies NOT divisible by 10 or 12.5 kHz*.

* There are a few non-standard frequencies that will not automatically tune to within .00015% of requested frequency. For those frequencies, the operator must change to the nearest standard frequency and then manually tune the reference oscillator to the desired frequency. Contact the factory for more details or consult the operations manual.

Front Panel Controls: 4 input level controls, meter select switch, encode, frequency select switches and execute, power adjust pot, transmit/standby.

Metering:

Illuminated meter showing: forward and reverse power, PA current, B+, audio compression. LEDs: transmit, AFC lock, high VSWR, and high temp.

Modulation Control:

Broadcast quality compressor limiter built in.

Audio Inputs:

Four balanced microphone (150 ohm) inputs (XLR3) with gain controls. One input switchable to balanced line level at input N. 4 inputs and "D" connector on rear.

Audio Input Level:

Microphone input level can be from -68dB to -35dB. High level can be from 0 to +10dBm 8-600 ohms.

Deviation:

Adjustable, $\pm 20\text{kHz}$ max.

Audio Bandwidth:

Standard 7.5 kHz. (5kHz and 10kHz available on special request).

Signal to Noise:

$\geq 50\text{dB}$ from 5 kHz deviation, 75 μsec pre/de-emphasis.

Frequency Response:

$\pm 1.5\text{dB}$ from 50 Hz to audio bandwidth, 75 μsec pre-emphasis.

Distortion:

$\leq 2\%$ from 50 Hz to audio bandwidth, 75 μsec pre-emphasis.

Audio Connectors:

XLR-3.

Encoding:

Subaudible (27 Hz) tone encoder built in.

Accessory Connector:

15 pin "D" connector, DC power (12.5-16 VDC and 13-30 VDC - available on different pins of D Sub), remote control, encode, line level input.

RF Output Impedance:

50 ohms.

RF Connector:

Type N-female.

Spurious Emission:

More than 60dB below carrier.

Power Requirements:

110-220 VAC or 220-240 VAC (power supply manually switched internally for proper input), 50/60 Hz. External DC operation on 12-15 volts or 15-30 volts.

Approximate PA Current Rating (at maximum power output):

8.5 to 10.5 amps. The data varies across frequency band.

Dimensions:

3.5" (8.89 cm) H x 11.5" (29.21 cm) W x 9" (36.83 cm) D.

Boxed Dimensions:

22" (55.88 cm) H x 19" (48.26 cm) W x 14.3" (22.86 cm) D.

Weight:

Net 8.25 lbs. (3.74 Kg) Packed 16.75 lbs (7.60 Kg).

FCC ID:

DDE-RPU-60W-150S for 135-185 MHz model.
DDE-RPU-60W-450S for 430-480 MHz model.