

**EX1020**  
SOLID ★ STATE ★ POWER

**300W | 500W | 1kW | 3kW**  
**High Quality - FM Transmitters**



**LOW COST**



- ▶ Powerful, Compact, Cost-effective
- ▶ High Efficiency, High Reliability
- ▶ Proven, Best-in-class Audio Quality
- ▶ Taking Your Radio to Another LEVEL - Growing Your Audience



## The most modern, robust, and ultra-linear transmitter on the market

Before deciding on the purchase of any equipment for your radio station, remember that the right choice will deliver the best financial results and help increase your audience. Immersive, well-defined sound, with lows and highs that flow freely and without distortion, elevates the station to a high level of prominence. What we present here is undoubtedly the most advanced FM transmitter, capable of delivering all of this.

Your station deserves equipment like this, and Sinteck introduces the EX1020 line, a powerful range of FM transmitting equipment that offers everything a major radio station needs. Compact, robust, efficient, and equipped with features that make it indispensable. Contact us!



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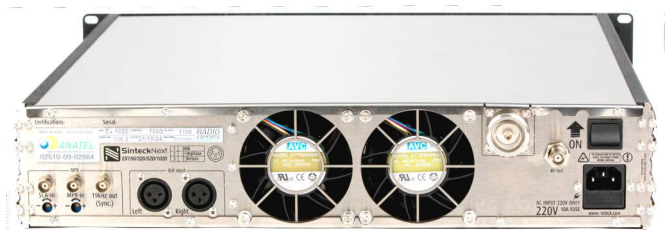
# EX320 | EX520 | EX1020 | EX3025

- ▶ 4 models: 300, 500, 1000W and 3000W adjustable output power, featuring a high-efficiency LDMOS design
- ▶ High-performance audio modulator: high-linearity VCO (significantly greater depth/clarity with no distortion)
- ▶ Stereo encoder with high channel separation
- ▶ RF power programming in TARGET mode, with reduction options based on time schedules
- ▶ Integrated single-band audio processing system, providing clean, distortion-free audio and removing the need for external audio compressors when the Left/Right XLR inputs are used
- ▶ Built-in RDS generator via optional add-on card, with inputs and outputs for an external RDS encoder

FRONT PANEL



REAR PANEL (ex. EX1020):



## TECHNICAL FEATURES:

RF Output Power:	EX3025: 3000W ajustable from 30W EX1020: 1000W ajustable from 10W EX520: 500W ajustable from 5W EX320: 300W ajustable from 5W
RF output impedance:	50 Ohms
RF output connector:	DIN 7/16" FEMALE
Frequency range:	87,5 - 108,1MHz programable sinth. (76 to 108MHz under request)
Frequency steps:	10KHz
Settings input:	Keyboard in the front panel (Down, UP, Select and Enter keys)
Frequency stability:	1 ppm (High precision TCXO) max. frequency variation 100Hz
Modulation type:	F3, FM direct modulation (VCO in final frequency)
Harmonic attenuation:	>80dBc
Residual AM mod. (Assyncr.)	Approximately 0.1% (65dB)
Residual AM mod. (Syncr.)	Approximately 0.05% (55dB)
Intermodulation distortion:	<0.05% @ 1kHz
Frequency response:	20Hz to 200kHz
Signal/noise FM ratio:	>73dB

## POWER SUPPLY SECTION:

AC Input:	220V +/- 20%, 45 to 68Hz
Surge protection:	Varistors, gas dischargers/transorbs, fast-action fuse or circuit breaker EX3025
Efficiency:	Better than 75% in 220V AC
DC power supplies:	1 3kW SMPS HUAWEI Model 4850G (EX320, EX520 and EX1020) 1 4kW SMPS HUAWEI Model 4875G (EX3025)
Overall consumption (full power):	EX3025: 4000W EX1020: 1330W EX520: 625W EX320: 375W
AC input connection:	Standard 3-pin IEC power connector with center grounding pin Neutrik EX3025

## MECHANICAL FEATURES:

Weight:	14.1kgs (EX320, EX520, EX1020) 19.1kgs (EX3025)
Dimensions:	483mm (19") W, 88.90mm (2RU) H, 470mm (18.50") D / (520mm EX3025)
Operating temperature:	0 to +45°C
Max. humidity:	95% for +45°C without condensation

## RF SECTION:

RF Devices:	EX3025: 2 RF transistors AMPLEON ART2K0 EX1020: 1 RF transistor AMPLEON ART1K6 EX520: 2 RF transistors NXP MRF300AN/BN EX320: 1 RF transistor NXP MRF300AN or BN
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## CPU AND DISPLAY:

CPU:	ARM M0 ST Software EX1020 Series
Telemetry:	No telemetry in this version
Audio level control:	Multi-turn trimpot in rear panel
RF power control:	Set by target with automatic power reduction by scheduled times (optional)
Monitor:	LCD 16x2 Blue back-light

## XLR INPUTS:

Connectors:	XLR Female
Input impedance:	600 Ohms balanced
Frequency response:	20Hz to 15kHz (THD+N < 0,1%)
Analog input level:	0dB to 75kHz carrier deviation
Stereo separation:	Better than 45dB @ 1kHz

## MPX INPUT:

Input connection:	1 MPX input (BNC), level adjust +15/-10dBm to 75kHz carrier deviation
Frequency response:	± 0.05dB from 20Hz to 53kHz and ± 0.2dB from 53kHz to 100kHz, THD < 0.03%

## SCA / RDS INPUTS:

Input connection:	BNC connector, level adjust from +15/-10dBm to 10kHz carrier deviation
Frequency response:	± 0.2dB from 53kHz to 100kHz

## RDS TONE SYNC. OUTPUT:

Output connection:	BNC connector, 1Vpp (fixed level)
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Sinteck Next in more than 30 countries



# WHY CHOOSE SINTECK?

With a manufacturing facility spanning over 1,500 m<sup>2</sup>, Sinteck Next operates a modern production complex capable of manufacturing high-performance, high-quality products. We have an efficient and highly committed engineering department, where every professional delivers outstanding work within their specific area of expertise. Our technical department enables us to deliver products that are fully tested and calibrated using high-precision instruments. Sinteck Next also operates a mechanical division equipped with state-of-the-art machinery, including machining centers, laser cutting, and CNC bending systems, allowing all production processes to be carried out entirely in-house. This ensures superior product quality and faster delivery times.

Technicians and assemblers are organized across dedicated production sectors, each assigned to specific equipment models. We also maintain a technical training department and place great importance on the continuous development of our professionals. All of this results in a product of exceptional quality at the end of the production chain. Our customer service team is structured into engineering, technical support, sales, after-sales/maintenance, administration, and finance departments.

If you are not yet a Sinteck customer, it will be our pleasure to assist you and offer cutting-edge products. If you are already a customer, feel free to contact us again. Your radio station is our success!

- ▶ Highly skilled customer service team
- ▶ Over 5,000 units installed in Brazil
- ▶ Over 25 years in the radio broadcast market
- ▶ Know it. Trust it. Recommend it

