

# **COMPACT TRANSMITTERS**

Siel's technical experience, gained after years of continuos research, developed a wide FM transmitters/exciters range, with powers comprised between 25 and 2000W. All these models are integrated devices, reliable, light in weight and compact in size.

# SIEL EXCITERS MODELS

#### EXC25

It is the model from which a whole series of LCD exciters/transmitters was developed. It is the ideal driver for many of the most complex broadcasting system up to 2000W.

It is the result of decades-long experience coupled with improved electro-magnetic emissions and safety characteristics. The apparatus maintenance requirements are low and its sturdy modular construction allows easy installation and use.

Its wide alphanumeric display as well as its control keyboard allow a simple navigation through the various options. Great care was taken in designing a software to permit natural feeling with the controls and easy adjustements or changes of parameters. Being digitally controlled, the apparatus may be programmed through its front panel or remotely. Besides, it is possible to enter passwords at different level for specific setting requirements.





Frequency range:	87.5 ÷ 108 Mhz
RF output power:	25W min .
Max reflected power:	3W
RF spurious attenuation:	>80dBc min., >85dBc typ.
RF harmonic attenuation:	>65dBc min., >70dBc typ.
RF output power impedance:	50 Ohm
Audio input connectors:	XLR female type
RF output power connector:	N
Composite and aux. input connectors:	BNC
S/N ratio mono :	>78dB min. >86dB typ. (30÷20000Hz CCIR)
S/N ratio stereo:	>72dB min. >77dB typ. (30÷20000Hz CCIR)
Stereo crosstalk:	<-50dB with encoder ext. <-60dB with encoder int.
Deviation limiter:	from 0 to +7dB
Audio/MPX input level:	-3.5 ÷ +12.5 dBm
Mains supply requirements:	115/230 Vac, +/-10% 125VA @ 25W output
Operating temperature range:	0 ÷ +35° C recomm.
	-10 ÷ +45° C max
Dimensions:	483 x 88 x 334 mm
Weight:	7 Kg

The exciter/transmitter EXC55, just like all other LDC display models, is the result of a common electrical/mechanical basic design: in fact, its components are laid out according to a common diagram with

a limited number of internal modules. We used the utmost care in producing a Hi-Fi quality modulated signal with a low residual noise and distortion. This device is very often used as driver for systems up to 3000W.





Frequency range:	87.5 ÷ 108 Mhz
RF output power:	100W min
Max reflected power:	80W
RF spurious attenuation:	>80dBc min., >85dBc typ.
RF harmonic attenuation:	>65dBc min., >70dBc typ.
RF output power impedance:	50 Ohm
Audio input connectors:	XLR female type
RF output power connector:	N
Composite and aux. input connectors:	BNC
S/N ratio mono :	>74dB min. >80dB typ. (30÷20000Hz CCIR)
S/N ratio stereo:	>70dB min. >74dB typ. (30÷20000Hz CCIR)
Stereo crosstalk:	<-50dB with encoder ext.<-60dB with encoder int.
Deviation limiter:	from 0 to +7dB
Audio/MPX input level:	-3.5 ÷ +12.5 dBm
Mains supply requirements:	115/230 Vac, +/-10% - 320VA @100W output
Operating temperature range:	0 ÷ +35° C recomm.
	-10 ÷ +45° C max
Dimensions:	483 x 132.5 x 360 mm
Weight:	15 Kg

The EXC105 transmitter is based on the same design of the EXC55 apparatus, obviously with more

power. Due to its remarkable performances and to its high reliability it is also used as driver of the EXC5005.





Frequency range:	87.5 ÷ 108 Mhz
RF output power:	100W min
Max reflected power:	8W
RF spurious attenuation:	>80dBc min., >85dBc typ.
RF harmonic attenuation:	>65dBc min., >70dBc typ.
RF output power impedance:	50 Ohm
Audio input connectors:	XLR female type
RF output power connector:	N
Composite and aux. input connectors:	BNC
S/N ratio mono :	>74dB min. >80dB typ. (30÷20000Hz CCIR)
S/N ratio stereo:	>70dB min. >74dB typ. (30÷20000Hz CCIR)
Stereo crosstalk:	<-50dB with encoder ext.<-60 dB with encoder int.
Deviation limiter:	from 0 to +7dB
Audio/MPX input level:	-3.5 ÷ +12.5 dBm
Mains supply requirements:	115/230 Vac, +/-10% - 320VA @100W output
Operating temperature range:	0 ÷ +35° C recomm.
	-10 ÷ +45° C max
Dimensions:	483 x 132.5 x 360 mm
Weight:	15 Kg

This transmitter combines Siel's experience in the production of FM transmitters with a special care in developing the requirements and the peculiar specifications of an Hi-Fi

design which bears comparison with any other device of the same kind. It is surely one of the most versatile and of the least expensive transmitters in the world.





Frequency range:	87.5 ÷ 108 Mhz
RF output power:	250W
Max reflected power:	15W
RF spurious attenuation:	>80dBc min., >85dBc typ.
RF harmonic attenuation:	>65dBc min., >70dBc typ.
RF output power impedance:	50 Ohm
Audio input connectors:	XLR female type
RF output power connector:	N
Composite and aux. input connectors:	BNC
S/N ratio mono :	>74dB min. >80dB typ. (30÷20000Hz CCIR)
S/N ratio stereo:	>70dB min. >74dB typ. (30÷20000Hz CCIR)
Stereo crosstalk:	<-50dB with encoder ext. <-60dB with encoder int.
Deviation limiter:	from 0 to +7dB
Audio/MPX input level:	-3.5 ÷ +12.5 dBm
Mains supply requirements:	115/230 Vac, +/-10% - 450VA @250W output
Operating temperature range:	0 ÷ +35° C recomm.
	-10 ÷ +45° C max
Dimensions:	483 x 132.5 x 360 mm
Weight:	15 Kg

The remarkable compact size and Siel's customary care in the manufacturing process, make of this EXC505 one of the most sought-after models.

Its wide power supply range (190-250 Vac) allows its use in unstable mains conditions. Besides, the transmitter provides the maximum reliability in hilly and mountainous areas.





Frequency range:	87.5 ÷ 108 Mhz
RF output power:	500W min
Max reflected power:	30W
RF spurious attenuation:	>80dBc min., >85dBc typ.
RF harmonic attenuation:	>65dBc min., >70dBc typ.
RF output power impedance:	50 Ohm
Audio input connectors:	XLR female type
RF output power connector:	7 / 16"
Composite and aux. input connectors:	BNC
S/N ratio mono :	>74dB min. >80dB typ. (30÷20000Hz CCIR)
S/N ratio stereo:	>70dB min. >74dB typ. (30÷20000Hz CCIR)
Stereo crosstalk:	<-50dB with encoder ext. <-60dB with encoder int.
Deviation limiter:	from 0 to +7dB
Audio/MPX input level:	-3.5 ÷ +12.5 dBm
Mains supply requirements:	115/230 Vac, +/-10% - 1200VA @500W output
Operating temperature range:	0 ÷ +35° C recomm.
	-10 ÷ +45° C max
Dimensions:	483 x 177 x 535 mm
Weight:	30 Kg

The EXC1005 model represents the spearhead of the LCD display models. It is light yet sturdy and easy to handle thanks to its compact dimensions and

reduced weight, features which make it an ideal solution when urgent interventions such as reparation and extraordinary maintenance must be carried out in hardly accessible posts.



Frequency range:	87.5 ÷ 108 Mhz
RF output power:	1000W min
Max reflected power:	60W
RF spurious attenuation:	>80dBc min., >85dBc typ.
RF harmonic attenuation:	>65dBc min., >70dBc typ.
RF output power impedance:	50 Ohm
Audio input connectors:	XLR female type
RF output power connector:	7 / 16"
Composite and aux. input connectors:	BNC
S/N ratio mono :	>74dB min. >80dB typ. (30÷20000Hz CCIR)
S/N ratio stereo:	>70dB min. >74dB typ. (30÷20000Hz CCIR)
Stereo crosstalk:	<-50dB with encoder ext.<-60dB with encoder int.
Deviation limiter:	from 0 to +7dB
Audio/MPX input level:	-3.5 ÷ +12.5 dBm
Mains supply requirements:	115/230 Vac, +/-10% - 2400VA @1000W
Operating temperature range:	0 ÷ +35° C recomm.
	-10 ÷ +45° C max
Dimensions:	483 x 177 x 535 mm
Weight:	30 Kg

The exciter EXC2005, designed in compliance with the most recent international standards and the most demanding requirements of advanced

broadcasters, offers outstanding performances at a very limited cost thanks to Siel's utmost care in the manufacturing process.





Frequency range:	87.5 ÷ 108 Mhz
RF output power:	300÷ 2000W min
Max reflected power:	160W
RF spurious attenuation:	>80dBc min., >85dBc typ.
RF harmonic attenuation:	>65dBc min., >70dBc typ.
RF output power impedance:	50 Ohm
Audio input connectors:	XLR female type
RF output power connector:	7 / 16"
Composite and aux. input connectors:	BNC
S/N ratio mono :	>75dB min. >78dB typ. (30÷20000Hz CCIR)
S/N ratio stereo:	>66dB min. >68dB typ. (30÷20000Hz CCIR)
Stereo crosstalk:	<-50dB with encoder ext. <-60dB with encoder int.
Deviation limiter:	from 0 to +7dB
Audio/MPX input level:	-3.5 ÷ +12.5 dBm
Mains supply requirements:	230/380 Vac,+/-15% 4800VA/3600W@2000Woutput
Operating temperature range:	0 ÷ +35° C recomm.
	-10 ÷ +45° C max
Dimensions:	483 x 310 x 570 mm
Weight:	47 Kg



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