

## EMX-7150 PHANTOM series

### TYPICAL APPLICATIONS

Sound-power and sound-field analysis  
Industrial Acoustics  
Room acoustics analysis  
Sound reinforcement  
Real time analyzers

The EMX-7150 is a 1/4" microphone made from stainless steel and using state of the art water tight Neutrik<sup>\*3</sup> connectors has a very accurate frequency response combined with the capability to measure high sound pressure levels up to 145dBspl. It is low impedance measurement microphone that can be operated from 12...52 V Phantom Power which is available on most professional microphone preamplifiers and professional computer interfaces. With its mechanically robust design it is well suited for harsh environment use such as open air sound reinforcement measurements. Its class 1 frequency response (*NOTE: NOT A CLASS 1 MICROPHONE*)\*1 makes it predestined for Room acoustics analysis including recording studios and home theaters. It can normally be used without the included freefield calibration data file for compensation. In this case take the individual calibration data as proof of its superb performance.

Our super protection windshield SWS -7 is recommended for open air use when limited amounts of spraying water as well as trickling water impact the microphone.

### FEATURES

Frequency range **10Hz...20kHz**  
Sensitivity **6mV/Pa** typ.  
Dynamic range ~30... >140dBspl  
3% distortion limits **146dBspl** typ.  
**Calibration** chart and calibration data files included on CD  
**IEC 61672 class 1** frequency response  
Dimensions: acoustic port dia. 1/4" (7mm)  
Microphone body **0.75"** (19mm)  
Overall length **6"** (152mm)  
Weight **0.3oz (75 grams)**

### ACTUAL SIZE

Small windshield included

High SPL capability  
freefield calibration data  
diffusefield calibration data<sup>\*2</sup>

1/4" acoustical port

Long microphone body  
reduces early reflection effects

All stainless steel body

Factory replaceable electronics & capsule

O-Ring seal

Water tight connection  
when using Neutrik<sup>\*3</sup> NC-3FX-HD connector

\*1: Class 1 Freq.Response under limited conditions (23°C ± 3°C, 1013 mbar ± 30mbar)

\*2: approximated by 90deg incidence response

\*3: The corporate names and names of the products stated in this brochure are trademarks or registered trademarks of the respective companies.

## SPECIFICATIONS

Values for 23° Celsius and 48V Phantom Power

### PERFORMANCE

Frequency Response characteristic	Free-Field
Polarization Voltage	Prepolarized
Nominal Sensitivity @1kHz	6mV/Pa
Microphone Polarity	Non-Inverting
Frequency Response calibrated	10...20.000 Hz
Frequency Response IEC61672 *1	class 1
Inherent Noise 100-10000 Hz	<30dB typ.
Inherent Noise 1/3 Oct.	<15dB typ.
Max. SPL. (3% distortion limit)	> 140dBspl
Max. SPL. (3% distortion) typ.	146 dBspl

### ENVIRONMENTAL

Operating Temperature range	-10...+55°
Storage Temperature Range	-20...+70°
Operating Humidity Range	0...90%r.H.
Axial Vibration Sensitivity	~ 50dB

### ELECTRICAL

Output Impedance	< 200 Ω
Phantom Power	12...52Vdc

### PHYSICAL

Housing Material	Stainless Steel
Sealing	O-ring/Polyurethane/Epoxy
Output Connector	XLR male
Dimensions	Ø 1/4" (7mm) x 6" (152mm)
Weight	0.3 oz (75g)

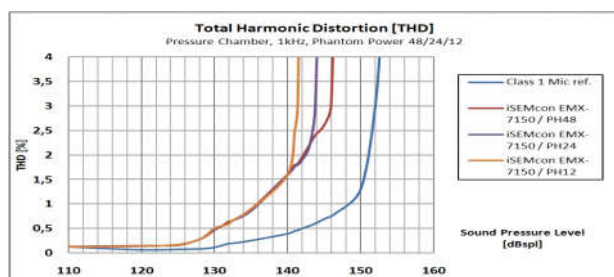
### CONFORMITY

IEC 61000-6-1;  
IEC 61010-1

### SPECIAL FUNCTIONALITY

Voltage surge protection ü

## THD , ref 1kHz



Human readable ASCII file:

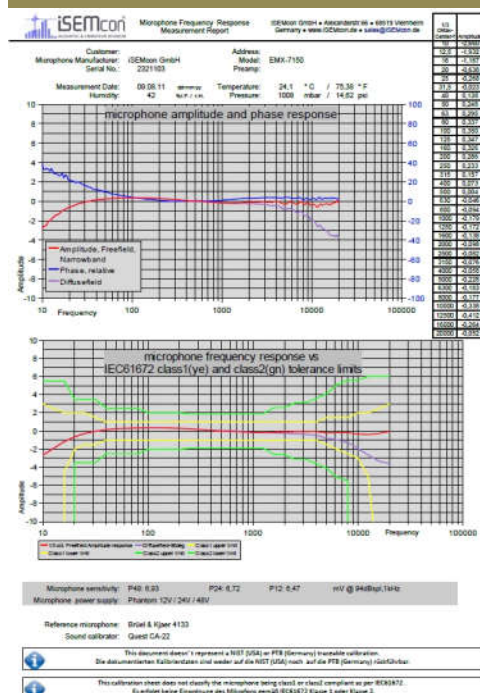
[www.iSEMcon.com](http://www.iSEMcon.com) freefield

Sensitivity 5.88 mV/Pa @1kHz  
 10.00 -0.02  
 11.26 0.10

19992.19 0.93

^ frequency (Hz) ^amplitude response (dB)

## FREQUENCY RESPONSE



### Ordering information :

Order No.	Name	
800060	EMX-7150-CF1	EMX-7150, clamp,USB Stick,cal Adapter
800070	EMX-7150-CF2	2x EMX-7150, shock-mount,USB Stick,cal Adapter
800080	EMX-7150-CF/MP	2x EMX-7150, clamps,USB Stick,cal Adapter
800081	EMX-7150-CF/MT	3x EMX-7150, clamps,USB Stick,cal Adapter
800082	EMX-7150-CF/MQ	4x EMX-7150, clamps,USB Stick,cal Adapter
150010	EMX-7150	EMX-7150, clamp,

## SUPPLIED ACCESSORIES



**Small windshield**



**Universal holding clamp**

## OPTIONAL ACCESSORIES



### SWS-7 wind- shield

Metal grid guard covered from impregnated foam. Protects microphone port from spraying water. Slide on retainer with O-ring prevents from trickle water



### MB-230-BOX

O-Ring seal  
Water protection  
Dust protection  
**Dimensions [mm]**  
210 x 167 x 90



### SOUND CALIBRA- TOR SC-1

94dBspl and 110dBspl switchable. Standard and custom size adapters. Calibration data included (includes individual pressure chart)

## POLAR PATTERNS, typical

