

## PRODUCT DATA

### 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>®2</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 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.



The EMX-7150 should not be plugged or unplugged into a mixer console or PA system unless the input channel is muted. If the system does not have a muting option the volume should be turned off. This avoids loud popping noise that can cause damage in speakers and/or affect your hearing.

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... >145dBspl
- ✓ 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

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>®2</sup> NC-3FX-HD  
connector



\*1: approximated by 90deg incidence response

\*2 The corporate names and names of the products stated in this brochure are trademarks or registered trademarks of the respective companies.

## CONTACT

**iSEMcon LLC**  
PO Box 607  
Sylvania, OH 43560-0607  
Phone 1-877-309-1002  
Fax 419-517-5007  
sales@iSEMcon.com

**iSEMcon GmbH**  
Alexanderstr. 66  
68519 Viernheim, Germany  
Phone +49 (0) 6204 911 24 91  
Fax +49 (0) 6204 911 24 90  
www.iSEMcon.com

## 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	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 $\Omega$
Phantom Power	12...52Vdc

### PHYSICAL

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

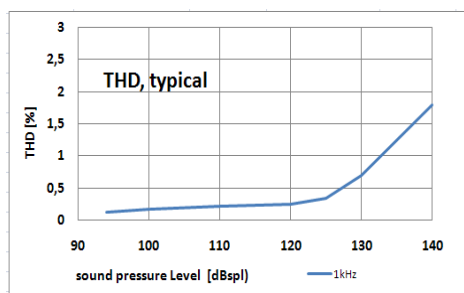
### CONFORMITY

IEC 61000-6-1;  
IEC 61010-1

### SPECIAL FUNCTIONALITY

Voltage surge protection ✓

## THD , ref 1kHz



## CALIBRATION DATA FILE FORMAT

Human readable ASCII file:

www.iSEMcon.com freefield

Sensitivity 5.88 mV/Pa @1kHz

10.00 -0.02

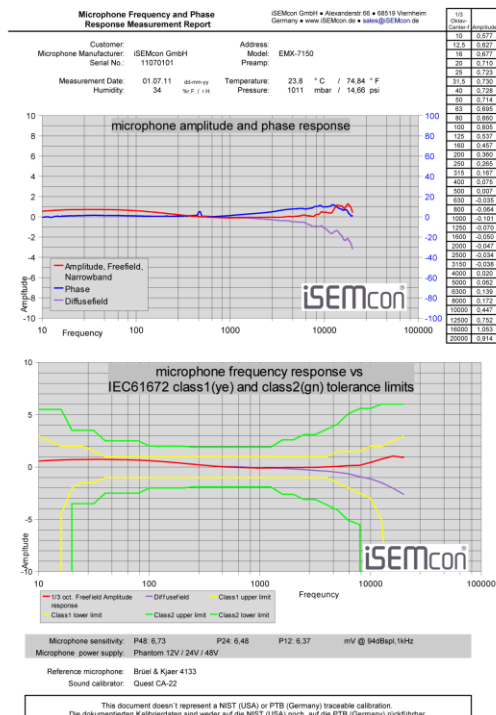
11.26 0.10

.....

1992.19 0.93

^ frequency (Hz) ^amplitude response (dB)

## FREQUENCY RESPONSE (Calibration Chart)



## SUPPLIED ACCESSORIES



Small windshield



Universal holding clamp

## OPTIONAL ACCESSORIES



SWS-7 windshield

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

or ask for our larger size MB-330-BOX



SOUND CALIBRATOR SC-1

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