

Corona Discharge Checker

MK-720 Series

ISO9001



JQA-0950

Immediate detection of insulation deterioration under hot line condition!

Discharge detection based on frequency analysis!

MK-720 detects periodicity of corona discharge at AC power-supplied facilities unaffected by ambient noises.

Ideal for insulation deterioration on insulators, disconnectors and circuit breakers.

Receiving ultrasonic wave from corona discharge enables us to survey electrical instruments without contact.



MK-720L-E
Long-distance type
(Approx. 10m)



MK-720-E
Short-distance type
(Approx. 3m)



Features

- Detects insulation deterioration on insulators, disconnectors and circuit breakers!
- Precise measurement in $\pm 8^\circ$ spot
- Identifies point of corona discharge with a laser pointer
- Records measurement data (Component rate, Waveform, FFT data)
- Easily transferable recorded data to PC via USB cable
- Generates audible sound from corona discharge and transmit through an earphone

Rear side



Inlaid composite image for this photo

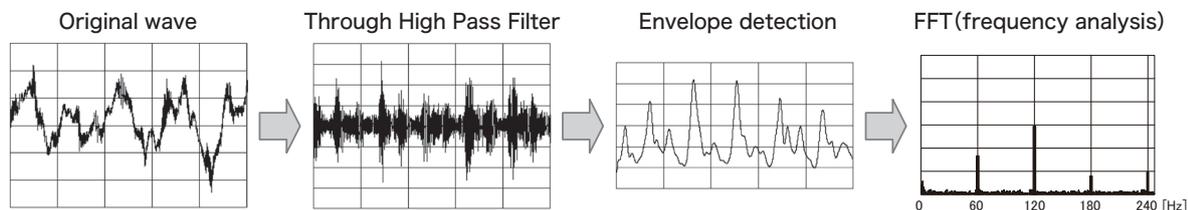


JFE Advantech Co., Ltd.

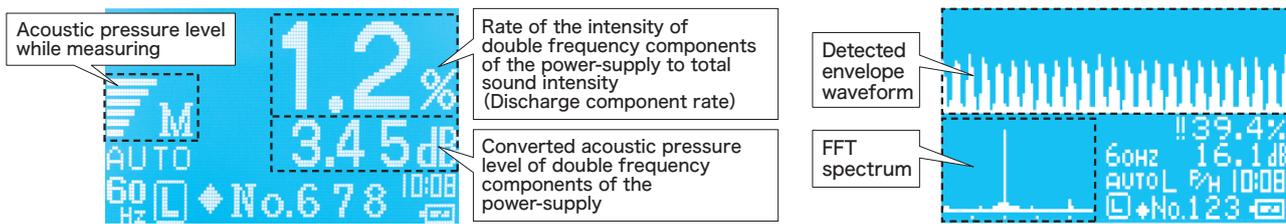
Measuring principle

Broadband ultrasound is emitted with corona discharge due to insulation deterioration at AC powered facilities. Since the intensity of the emitted ultrasound varies periodically with alternative voltage, double frequency components of power-supply appears prominently in frequency analysis after envelope detection of the received ultrasonic wave.

MK-720 series can detect corona discharge without effects of ambient noises by evaluating the intensity of double frequency components of the power-supply.



Measurement display



Measured data is hold and memorised.

Only MK-720L displays detected envelope waveform and FFT spectrum.

Specifications

Model	MK-720L-E	MK-720-E
Detecting frequency	Central frequency 40kHz	
Detecting directionality	±8°	
Functions	Display of discharge component rate, Display converted value in acoustic pressure Alarm based on discharge component rate, Measuring point indication with laser pointer (Laser pointer light intensity Class 2 IEC 6825-1)	
	Peak hold mode Display of measured wave and FFT spectrum	
Measurement sensitivity of Discharge component rate (Discharge measurement equivalent 100 to 300pC)*1	20 % and more at 2 meters distance, 6% and more at 8 meters distance	15 % and more at 1 meter distance
Data memory	Discharge component rate, Converted value in acoustic pressure	Max. 200 values
	Received ultrasound waveform, FFT, TOP10	Max. 70 values
Output	Buzzer by setting level excess Signal output terminal (φ3.5mm mini jack) USB port for memory data output (USB mini B socket)	
Power supply	AA dry alkaline battery 4 pcs (over continuous 7 hours use)	
Dimensions·Net weight	W 174 x H 272 x D 98mm Approx.370g (excluding batteries)	
Measuring ambient	0 - 40°C, 10 - 85%RH (non condensing)	
Standard configuration	Main unit, AA dry battery x 4, USB cable, Software (CD)*2, Earphone, Strap, Instruction manual, Inspection sheet	
Option	Soft case (MK-9702), Carrying case (MK-9703), Reference oscillator (MP-161)	

*1 Measurement sensitivity is based on the measuring reference oscillator (MP-161), ambient temperature 25°C degrees C indoor condition.

*2 MK-720 series software requires English OS for Windows®, Windows Vista®, Windows® 7, Windows® 8, 8.1 and Excel® 2003 or later.

®Windows®, Windows Vista®, Windows® 7, Windows® 8, 8.1 and Excel® 2003 are registered trademark of Microsoft Corporation in the United States and other countries.

*All specifications data contained in this catalog are subject to change without notice.

JFE Advantech Co., Ltd.
 JFE formerly Kawatetsu Advantech co.,Ltd.
 URL : <http://www.jfe-advantech.co.jp/>

Tokyo Head Office (Overseas Sales)
 JFE Kuramae Bldg., 2-17-4 Kuramae, Taito-ku, Tokyo
 111-0051, Japan
 e-mail: tokyo@jfe-advantech.co.jp Tel. +81-3-5825-5577 fax. +81-3-5825-5591

Head Office and Main Plant
 3-48, Takahata-cho, Nishinomiya-shi, Hyogo Pref.
 663-8202, Japan
 e-mail: honsha@jfe-advantech.co.jp Tel. +81-798-66-1508 fax. +81-798-65-7025