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**EAC**



**Flicker, voltage fluctuations and harmonics  
meter  
IFG 20.1M-1**

**DATASHEET**

Petrozavodsk

## Contents

1. Product Features.....	3
2. Technical Specifications.....	4
3. Packing Contents.....	7
4. Warranty Obligations.....	8



## 1 Product Features

2.2 Flicker, voltage fluctuations and harmonics meter IFG 20.1M-1 is manufactured in compliance with **GOST 30804.3.2-2013 (IEC 61000-3-2:2009)**, **GOST 30804.3.3-2013 (IEC 61000-3-3:2008)**, **GOST R 51317.4.15-2012 (IEC 61000-4-15:2010)** and designed for:

- short-term flicker indicator measurement, Pst;
- long-term flicker indicator measurement, Plt;
- measurement of relative voltage deviation, d(t);
- maximum absolute voltage change measurement, dmax;
- measurement of current harmonic components consumed by the equipment from the mains;
- measurement of the current consumed by the tested equipment, I(t);
- tested equipment input voltage measurement, U(t);
- tested equipment power measurement, P(t);
- generation of stable 220 V; 50 Hz AC to power the tested equipment.

1.2. Area of application: technical, research and other tests under laboratory conditions for electrical and electronic equipment powered by 220 V, 50 Hz mains supply to comply with the requirements of:

- **GOST 30804.3.2-2013 (IEC 61000-3-2:2009)**;
- **GOST 30804.3.3-2013 (IEC 61000-3-3:2008)**;

## 2 Technical Specifications

Power source	
Output voltage AC	220 V
Frequency	50 Hz
Maximum current	20 A
Compliance with requirements	GOST 30804.3.2-2013 (IEC 61000-3-2:2009); GOST 30804.3.3-2013 (IEC 61000-3-3:2008);
Flicker analysis	
Compliance	GOST 30804.3.3-2013 (IEC 61000-3-3:2008) GOST R 51317.4.15-2012 (IEC 61000-4-15:2010)
Measurements	$d_{max}$ , $d_c$ , $d(t)$ , $P_{st}$ , $P_{lt}$ , $P_{inst}$
Flicker impedance (built-in) Line	0,24 ohm+j0,15 ohm
Flicker impedance (built-in) Neutral	0,16 ohm+j0,10 ohm
Voltage rating	3-260 V
Current rating	0,05-20 A
Voltage fluctuation range	20% max
Accuracy $P_{st}$ , $P_{lt}$	Better 5%
Harmonics analysis	
Compliance	GOST 30804.3.2-2013 (IEC 61000-3-2:2009)
Measurements	1st...40 <sup>th</sup> harmonics
Measurements window	Rectangular window with 16 periods
Algorithm	FFT
Voltage rating	3-260 V
Current rating	0,05-20 A
General	
Interface	USB
Power supply	187-242V, 45-55 Hz
Dimensions (HxWxD)	600x520x340 mm
Weight	30 kg

### 3 Packing Contents

Item	Name	Quantity
1. Flicker, voltage fluctuations and harmonics meter	IFG 20.1M-1	1 unit
2. Manual		1 unit
3. Laptop	Purchased Part	1 unit
4. Printer		1 unit
5. Power outlet		1 unit
6. '20A' outlet plug		1 unit

### 4 Warranty Obligations

4.1. The manufacturer shall provide warranty service for the meter over 24 months after work acceptance is made in accordance with the contract.

4.2. The warranty obligations shall not apply to equipment with clear mechanical or other damage caused by malfunctioning, mistreatment or accidents. The warranty period ends if the repair is made by the Customer or any third party.

