

PAL

No. DZ20227620M

TEST REPORT

PAL

SAMPLE NAME iMeter 7A

CLIENT CET Electric Technology Inc.

MANUFACTURER CET Electric Technology Inc.

TEST TYPE Commission Test

**Experiment and Verification Center, State Grid
Electric Power Research Institute**

2023.3.30



SUMMARY OF THE REPORT

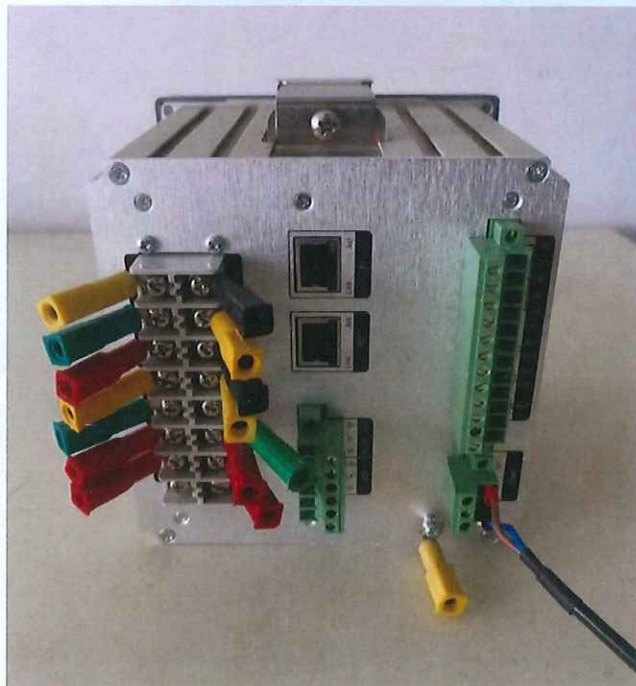
Test type	Commission test	Sample type	iMeter 7A
		Sample name	/
Client	CET Electric Technology Inc.	Registered address of client	8/F, Westside, Building 201, Terra Industrial & Tradepark, Che Gong Miao, Shenzhen, Guangdong 518040, China
Manufacturer	CET Electric Technology Inc.	Registered address of manufacturer	8/F, Westside, Building 201, Terra Industrial & Tradepark, Che Gong Miao, Shenzhen, Guangdong 518040, China
Quantity of sample	1	Sample No.	DZ20227620
Receipt date of sample	2023.02.16	Condition of sample	Intactness
Software version	/	Check code	/
Test date(s)	2023.02.16 to 2023.03.22		
Test location(s)	No. 19 Chengxin Avenue, Jiangning District, Nanjing, China		
Test standard(s)	<p>IEC 61000-4-30 Ed.3.1 (2021) "Electromagnetic compatibility (EMC)-Part 4-30: Testing and measurement techniques-Power quality measurement methods"</p> <p>IEC 62586-2 Ed.2.1 (2021) "Power quality measurement in power supply systems-Part 2: Functional tests and uncertainty requirements"</p> <p>IEC 61000-4-15 Ed.2.0 (2010) "Electromagnetic compatibility (EMC)-Part 4-15: Testing and measurement techniques-Flickermeter-Functional and design specifications"</p> <p>IEC 61000-4-7 Ed.2.1 (2009) "Electromagnetic compatibility (EMC)-Part 4-7: Testing and techniques-General guide on harmonics and interharmonics measurement measurements and instrumentation, for power supply systems and equipment connected thereto"</p> <p>IEC 61000-2-4 Ed.2.0 (2002) "Electromagnetic compatibility (EMC)-Part 2-4: Environment-Compatibility levels in industrial plants for low-frequency conducted disturbances"</p>		
Conclusion	The sample of CET Electric Technology Inc.: iMeter 7A Advanced Power Quality Analyzer, after quality inspection, the results meet the requirements of test standards.		
Issued by	Wan Dechun	Issue date	2023.03.30
Note	This report replaces the report numbered DZ20227620, which would be invalid from 15 May 2023.		

Sample photos

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SUMMARY OF THE REPORT

Sample type	iMeter 7A		Sample name	/	
Quantity of sample	1		Sample No.	DZ20227620	
Receipt date of sample	2023.02.16		Condition of sample	Intactness	
Software version	/		Check code	/	
Test date(s)	2023.02.16 to 2023.03.22				
Test location(s)	No. 19 Chengxin Avenue, Jiangning District, Nanjing, China				
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Main test instruments: name, type, serial number and expire date					
Relay Protection Tester	CMC256plus	PAL/D-03.0015	2024.03.02		
Standard power source	6100B	PAL/D-09.0011	2023.11.17		
Integrated Relay Protection Tester	ONLLY-BQ660	PAL/D-03.0125	2024.03.06		
Digital Multi-function Meter	8846A	PAL/D-03.0164	2024.03.02		
Signal Generator	SMC100A	PAL/F-03.0004	2023.10.10		
Power amplifier	BBA100-A500	PAL/F-03.0011	2023.10.10		
Integrated Time Accuracy Tester	FH-GX	PAL/E-SZ.0007	2024.03.02		
Power Quality Standard Source	PQC700A	PAL/D-09.0010	2023.09.06		
Conclusion	The sample of CET Electric Technology Inc.: iMeter 7A Advanced Power Quality Analyzer, after quality inspection, the results meet the requirements of test standards.				
Tested by	Huang Zheng	Checked by	Jang Peng	Examined by	Cai Dan
					
Note	/				

List of the Test Items

No.	Test items	Conclusions	Notes
1	Power Frequency (Class A)	Measurement method	Pass
		Measurement uncertainty and measuring range	Pass
		Measurement evaluation	Pass
2	Magnitude of Supply Voltage (Class A)	Measurement method	Pass
		Measurement uncertainty and measuring range	Pass
		Measurement aggregation	Pass
3	Flicker (Class A)	Sinusoidal / rectangular voltage changes	Pass
		Rectangular voltage changes and performance testing	Pass
		Combined frequency and voltage changes	Pass
		Distorted voltage with multiple zero crossings	Pass
		Bandwidth test using harmonic and inter-harmonic side band modulation	Pass
		Phase jumps	Pass
		Rectangular voltage changes with 20% duty cycle	Pass
4	Supply Voltage Interruptions, Dips and Swells (Class A)	General	Pass
		Check dips / interruptions in polyphase system	Pass
		Check swells in polyphase system	Pass
5	Supply Voltage Unbalance (Class A)	General	N/A
		Measurement method, measurement uncertainty and measuring range	Pass
		Aggregation	Pass
6	Voltage Harmonics (Class A)	Measurement method	Pass
		Measurement uncertainty and measuring range	Pass
		Measurement aggregation	Pass
7	Voltage Interharmonics (Class A)	Measurement method	Pass
		Measurement uncertainty and measuring range	Pass
		Measurement aggregation	Pass
8	Mains signaling voltages on the supply voltage (Class A)	Measurement method	Pass
		Measurement uncertainty and measuring range	Pass
9	Measurement of Underdeviation and Overdeviation Parameters (Class A)	Measurement method	Pass
		Measurement uncertainty and measuring range	Pass
		Measurement aggregation	Pass

No.	Test items		Conclusions	Notes
10	Flagging (Class A)	Check flagging is not set when flagging conditions are not met	Pass	
		Flagging in polyphase system caused by voltage dip (for Plt flicker)	Pass	
		Flagging in polyphase system caused by voltage dip (for parameters other than Plt)	Pass	
		Flagging in polyphase system caused by voltage swell	Pass	
		Flagging in polyphase system caused by voltage interruption	Pass	
11	Clock Uncertainty (Class A)	Check Clock Uncertainty	Pass	
12	Rapid Voltage Changes (RVC) (Class A)	RVC parameters and evaluation	N/A	
		General	N/A	
		"No RVC" tests	Pass	
		"RVC threshold and setup" test	Pass	
		"RVC parameters" test	Pass	
		"RVC polyphase" test	Pass	
		"Voltage is in steady-state condition" tests	Pass	
13	Magnitude of Current (Class A)	Measurement method	Pass	
		Measurement uncertainty and measuring range	Pass	
		Measurement aggregation	Pass	
14	Harmonic Currents (Class A)	Measurement method	Pass	
		Measurement uncertainty and measuring range	Pass	
		Measurement aggregation	Pass	
15	Interharmonic Currents (Class A)	Measurement method	Pass	
		Measurement uncertainty and measuring range	Pass	
		Measurement aggregation	Pass	
16	Current Unbalance (Class A)	General	N/A	
		Measurement method, measurement uncertainty and measuring range	Pass	
17	Conducted emissions in the 2 kHz to 150 kHz range (Class A)	Measurement method – 2 kHz to 9 kHz	N/A	
		Measurement method – 9 kHz to 150 kHz	N/A	
		Measurement range and measurement uncertainty	Pass	
		Aggregation	Pass	

NOTE:

Test sample does meet the requirement.....: Pass

Test sample does not meet the requirement.....: Fail