



# Kyoritsu 6516 and 6516BT Multi Function Tester



12 in 1

<b>Insulation</b> 100/250/500/1000V	<b>Loop</b> 2/20/200/2000Ω	<b>RCD</b> 10/30/100/300/500/1000mA	<b>ACV</b> 300V/600V
<b>PSC</b> 2000A/20kA	<b>PFC</b> 2000A/20kA 2000A/50kA	<b>Earth</b> 20/200/2000Ω	<b>Phase rotation</b>
<b>SPD(Varistor)</b>	<b>Frequency</b>	<b>PAT</b>	<b>Continuity</b> 20/200/2000Ω

## Features at a glance

<b>Insulation</b>	<ul style="list-style-type: none"> <li>4 ranges available for insulation resistance test(100/250/500/1000V) Automatic discharge of circuit capacitance.</li> <li>Polarization Index(PI) and Dielectric Absorption Ratio (DAR).</li> </ul>
<b>Loop</b>	<ul style="list-style-type: none"> <li>High test current range of 2Ω with 0.001Ω resolution.</li> <li>Zs Limit compares the values required by Electrical Installations Standard with measured results.</li> </ul>
<b>RCD</b>	<ul style="list-style-type: none"> <li>Type AC, A, F, B(General &amp; Selective) and Variable RCDs.</li> <li>Single and Auto test, Ramp test and Contact voltage.</li> </ul>
<b>Earth</b>	<ul style="list-style-type: none"> <li>Earth resistance test 2 and 3 wires with all accessories included.</li> </ul>
<b>ACV</b>	<ul style="list-style-type: none"> <li>TRMS Voltage measurements 2-600V, Mains Frequency.</li> </ul>
<b>Continuity</b>	<ul style="list-style-type: none"> <li>Continuity test at 200mA or 15mA with selectable buzzer for fast judgment.</li> </ul>
<b>Phase rotation</b>	<ul style="list-style-type: none"> <li>On 3-phase lines with clear indication of the sequence on the display.</li> </ul>
<b>SPD (Varistor)</b>	<ul style="list-style-type: none"> <li>Surge Protective Device test, for SPD that uses varistor.</li> </ul>
<b>PAT</b>	<ul style="list-style-type: none"> <li>Portable Appliance Tester function, for Insulation and Continuity.</li> </ul>
<b>Display</b>	<ul style="list-style-type: none"> <li>Color LCD 3.5 inches dot matrix.</li> </ul>
<b>ATT</b>	<ul style="list-style-type: none"> <li>Anti-Trip Technology (with 2 &amp; 3 wire) for no trip LOOP L-PE testing on all RCDs.</li> <li>With 2 wire only, very useful in case of no Neutral (e.g. 3-phase motor lines).</li> </ul>
<b>HELP</b>	<ul style="list-style-type: none"> <li>Display shows how to connect the instrument according to the function selected.</li> </ul>
<b>Memory</b>	<ul style="list-style-type: none"> <li>Save and display up to 1000 data.</li> </ul>
<b>Bluetooth</b>	<ul style="list-style-type: none"> <li>Communication by "KEW Smart" (6516BT only). App available for Andriod or iOS</li> </ul>

## 6516/6516BT


6516/6516BT						
Insulation resistance					SPD(Varistor)	
Test voltage	100V	250V	500V	1000V	Max. 1000V	
Measuring ranges	2.000/20.00/200.0MΩ (Auto-ranging)		20.00/200.0/1000MΩ (Auto-ranging)	20.00/200.0/2000MΩ (Auto-ranging)	0-1000V(goes up by 1V)	
Accuracy	±2%rdg±6dgt (2.000/20.00MΩ) ±5%rdg±6dgt (200.0MΩ)		±2%rdg±6dgt (20.00/200.0MΩ) ±5%rdg±6dgt (1000MΩ)	±2%rdg±6dgt (20.00/200.0MΩ) ±5%rdg±6dgt (2000MΩ)	±5%rdg±5dgt	
Rated current	1.0-1.2mA @0.1MΩ	1.0-1.2mA @0.25MΩ	1.0-1.2mA @0.5MΩ	1.0-1.2mA @1MΩ	-	
Output short circuit current	1.5mA max				-	
Loop impedance						
Function	LOOP ATT L-PE/L-N(3wire)		L-PE(2wire)	LOOP HIGH L-PE(0.01ΩRes)	L-PE(0.001ΩRes) L-N/L-L	
Rated voltage	100-260V(50/60Hz)	48-260V(50/60Hz)	48-260V(50/60Hz)	100-260V(50/60Hz)	48-500V(50/60Hz)	
Impedance range	20.00/200.0/2000Ω (Auto-ranging)		20.00/200.0/2000Ω (Auto-ranging)	2.000Ω	20.00Ω	
Accuracy	±3%rdg±6dgt		±3%rdg±10dgt	±3%rdg±4dgt	±3%rdg±4dgt	
Nominal test current at 0Ω external loop: Magnitude/Duration at 230V	L-N:6A/60ms N-PE:10mA	L-PE:15mA	20Ω:6A/20ms 200Ω:0.5A/20ms 2000Ω:15mA/500ms	25A/20ms	6A/20ms	
PSC/PFC						
Range	2000A/20kA(PSC/PFC)	2000A/20kA(PFC)	2000A/20kA(PFC)	2000A/50kA(PFC)	2000A/20kA(PSC)	
Accuracy	PSC/PFC accuracy is derived from measured loop impedance specification and measured voltage specification					
RCD						
Rated voltage	100-260V(50/60Hz)					
Function	x1/2, x1,x5,Ramp,Auto,Uc 10/30/100/300/500/1000mA/variable					
RCD type	AC(G/S)		A(G/S)	F(G/S)	B(G/S)	
Trip current setting	x1/2,x1,Uc	10/30/100/300/500/1000mA(G) 10/30/100/300/500(S)	10/30/100/300/500mA	10/30/100/300/500mA	10/30/100/300mA	
	x5	10/30/100mA	10/30/100mA	10/30/100mA	10/30mA	
	Ramp	10/30/100/300/500mA	10/30/100/300/500mA	10/30/100/300/500mA	10/30/100/300mA	
Accuracy	Trip current	x1/2	-8% - -2%	-10% - 0%	-10% - 0%	
		x1	+2% - +8%	0% - +10%	0% - +10%	
		x5	+2% - +8%	0% - +10%	0% - +10%	
	Trip time	Ramp	-4% - +4%	-10% - +10%	-10% - +10%	
		x1/2	2000ms(G/S):±1%rdg±2ms			
		x1	550ms(G):±1%rdg±2ms,1000ms(S):±1%rdg±2ms			
x5	410ms(G/S):±1%rdg±2ms					
Continuity			Volts			
Range	20.00/200.0/2000 W (Auto-ranging)		Range	300.0/600V(Auto-ranging)		
Open circuit voltage (DC)	7-14V		Measuring ranges	Volts	2-600V	
Measuring current	200mA	>200mA		Frequency	45-65Hz	
	15mA	15mA±3mA	Accuracy	Volts	±2%rdg±4dgt	
Accuracy	±2%rdg±8dgt			Frequency	±0.5%rdg±2dgt	
Phase Rotation			Earth			
Rated voltage	48-600V(50/60Hz)		Range	20.00/200.0/2000Ω(Auto-ranging)		
Remarks	Remarks Correct phase sequence: are displayed "1.2.3" and mark Reversed phase sequence: are displayed "3.2.1" and mark		Accuracy	±2%rdg±0.08Ω(20.00Ω) ±2%rdg±3dgt(200.0/2000Ω)		
General						
Applicable Standards	IEC 61010-1 CAT 1 300V,CAT 1 600V Pollution degree 2, IEC 61010-2-034, IEC 61557-1,2,3,4,5,6,7,10, IEC 60529(IP40), IEC 61326(EMC)					
Communication Interface	USB, Bluetooth® 5.0 LE(Bluetooth® Low Energy)*1, Android™ 5.0 or more, iOS 10.0 or more					
Power source	LR6 x 8					
Dimensions	136(L) x 235(W) x 114(D)mm					
Weight	1300g (including batteries.)					
Accessories	Main test lead*2, 7281(Test leads with remote control switch), 7246(Distribution board test lead), 7228A(Earth resistance test leads), 8041(Auxiliary earth spikes[2 spikes/set]) 9084(Cord case), 9142(Carrying Case), 9121(Shoulder strap), 9199(Shoulder pad), Buckle, Battery, Instruction manual, 8212-USB(USB adaptor with "KEW Report(Software)")*3					
Optional	8212-USB(USB adaptor with "KEW Report(Software)")*3, 8259(Adapter for measurement terminal), 7272(Precision measurement Cord set), 8017A(Extension prod long)					

\*1 6516BT only

\*2 7187A:British plug, 7218A:(EU)European SHUKO plug, 7221A(SA) South african plug, 7222A:(AU)Australian plug

\*3 8212-USB : Standard accessory for 6516, optional accessory for 6516BT

### Communication interface



**USB**

**Bluetooth**

**KEW Report**

**KEW Smart \***

Please search "KEW Smart"  
Communication charge may be incurred separately  
to download application.

### Selection Guide

		6516BT	6516
Continuity	15mA	X	X
Loop	2 wires	X	X
	0.001Ω Resolution	X	X
	Zs table	X	X
PSC/PFC		X	X
RCD	Variable test current	X	X
	Type B (G&S)	X	X
	Type F (G&S)	X	X
PAT Test		X	X
SPD Test Function		X	X
HELP Display		X	X
Communication interface	USB	X	X
	Bluetooth®	(Optional) X	-
Measurement category	CAT IV 300V	X	X
	CAT IV 600V	X	X

Bluetooth® is a trademark or registered trademark of Bluetooth SIG, Inc.

Android™ is a trademark or registered trademark of Google Inc.

iOS is a trademark or registered trademark of Cisco Technology, Inc. in the United States and other countries.