

# TIME® 5100/5102/5104

PORTABLE HARDNESS TESTER

**Standard Delivery**

●Main unit	1
●Test block HLD	1
●USB connecting cable	1
●Cleaning brush	1
●Battery AAA 1.5V	2
●TIME certificate	1
●Warranty card	1
●Instruction manual	1

**Optional Accessory**

- Support rings
- Dataview software

**Features**

- USB communication interface
- Automatic identification of impact test direction
- Memory of 270 average data in 9 group files
- Upper and lower limit setting
- Automatically switch off
- Backlight for convenient use in darkness
- Battery capacity display
- AAA 1.5V battery
- Integrated calibration function
- TIME®5100: integrated with D impact device for normal hardness testing
- TIME®5102: integrated with C impact device for hardness testing on thin, light and face-hardened workpiece
- TIME®5104: integrated with DL impact device for hardness testing of deep grooves and tooth surface

**Technical Specification**

Model	TIME®5100	TIME®5102	TIME®5104
Impact device	D integrated	C integrated	DL integrated
Hardness scales	HLD, HB, HRC, HRB, HV, HS	HLC, HB, HRC, HRB, HV, HS	HLDL, HB, HRC, HRB, HV, HS
Accuracy	±6HLD(760 ±30HLD)	±12HLC	±12HLDL
Memory	270 average readings in 9 group files		
Output	RS 232 to printer	RS232 to printer	RS232 to printer
Min. surface roughness of work piece	1.6µm ( Ra)	0.4µm ( Ra)	1.6µm ( Ra)
Max. work piece hardness	960HLD	960HLC	950HLDL
Min. radius of work piece (convex/concave)	Rmin = 50mm (with support ring Rmin= 10mm)	Rmin=11mm (with support ring )	Rmin = 10mm (with support ring Rmin= 10mm)
Min. work piece weight	2~5kg on stable support 0.05~2kg with compact coupling	0.5~1.5kg on stable support 0.02~0.5kg with compact coupling	2~5kg on stable support 0.05~2kg with compact coupling
Min. work piece thickness coupled	5mm	1mm	5mm
Min. thickness of hardened layers	0.8mm	0.2mm	0.8mm
Indentation depth	Impact devices data	Impact devices data	Impact devices data
Continuous working time	8h (without backlight)		
Power	AAA 1.5V batteries		
Operating temperature	0~40°C	0~40°C	0~40°C
Dimensions (mm)	155×55×25	160×60×25	215×60×25
Weight (g)	180	180	180