



Component Analyser Selection Chart

Only summary information shown here. For more detailed product data, please click on the product heading.

Function/Feature	LCR40	LCR45	Atlas ESR	DCA55	DCA75	Atlas SCR	Notes
Resistance Measurement	✓	✓	✓				Atlas ESR measures 0.00 to 40Ω (ESR70), 0.00 to 20Ω (ESR60). Atlas LCR measures 1Ω to 2MΩ.
Inductance Measurement	✓	✓					LCR40 min resolution of 1μH, LCR45 0.2μH.
Low Value Capacitance (<1μF) Measurement	✓	✓					LCR40 min resolution of 1pF, LCR45 0.2pF.
High Value Capacitance (>1μF) Measurement	✓	✓	✓				Atlas ESR up to 22000μF, Atlas LCR up to 10000μF.
ESR Measurement			✓				
Automatic Component Type Identification	✓	✓		✓	✓	✓	General component type identification (not part numbers).
Complex impedance Measurement		✓					
Magnitude and Phase of impedance		✓					
Continuous fluid Measurements		✓					
Manual and Auto Modes		✓					
Automatic Pinout Identification				✓	✓	✓	
In-Circuit Support			✓				Atlas ESR can be used in-circuit for ESR measurement.
Built-in sounder (pass/fail etc)			✓		✓		Atlas ESR model ESR70 has built-in sounder.
USB communication					✓		For firmware upgrade, component data and curve tracing.
Graphic display of component symbol					✓		
PC based curve tracing					✓		Curve tracing for +/-12V, +/-12mA.
Interchangeable Probe Support	✓	✓	✓				Supports industry standard 2mm connectors.
Component Support							
Inductors	✓	✓					
Capacitors	✓	✓	✓				
Resistors	✓	✓	✓				Atlas ESR measures 0.00 to 40Ω (ESR70), 0.00 to 20Ω (ESR60).
Bipolar Transistors				✓	✓		
"Digital" Transistors				✓	✓		
Darlington Transistors				✓	✓		
MOSFETs				✓	✓		
"Smart" Protected MOSFETs					✓		
Diodes				✓	✓		
Diode Networks				✓	✓		
LEDs				✓	✓		
BiColour LEDs				✓	✓		Two and Three lead types.
Triacs and SCRs (Thyristors)				✓	✓	✓	Atlas DCA test currents 5mA max. DCA Pro test currents 10mA max.
Junction FETs				✓	✓		Atlas DCA will only identify the <i>gate</i> lead of JFETs.
SiC Normally-Off JFETs					✓		
Zener diodes					✓		Zener voltage up to around 9V at 5mA.
IGBTs					✓		
Voltage regulators					✓		Regulator voltage up to around 8V.
Semiconductor Measurements							
PN junction voltage drop				✓	✓		
H _{FE} (gain) measurement				✓	✓		Typically from 4 to 32000.
Bipolar leakage current				✓	✓		
Digital transistor resistances					✓		Measurement of series <u>and</u> shunt resistors.
Digital transistor thresholds					✓		Measurement of on/off input thresholds.
Darlington resistances					✓		Total base-emitter resistance measurement.
IGBT gate threshold voltage					✓		
MOSFET gate threshold voltage				✓	✓		
JFET pinch-off voltage					✓		
Transconductance					✓		Transconductance for JFETs, MOSFETs, SiC JFETs and IGBTs.
Zener voltage					✓		Zener voltage up to around 9V at 5mA.
Regulator output voltage					✓		Regulator voltage up to around 8V.
Regulator drop-out voltage					✓		
Regulator quiescent current					✓		
Triac and SCR gate sensitivity						✓	Atlas SCR can categorise gate sensitivity from 50uA to 100mA.