

## Appendix C: Vocabulary

The following are terminology that is used in the discussion of the experiments

Direct Current (DC)	A unidirectional flow of electrical current
Direct Current Voltage	A voltage that does not change polarity
DC Ammeter	A meter that measures direct current
DC Voltmeter	A meter that measures direct current voltage
Multimeter	A multi-functional meter that can measure current, voltage, resistance, Temperature, etc.
Photovoltaic (PV)	A method of generating electrical current from light
Photovoltaic Cell	A cell that generates an electrical current when illuminated by light– also called a solar cell
Photovoltaic Module	A group of photovoltaic cells connected together
Resistance	An electrical component that resists current flow turning electrical energy into heat. Used in circuits to control voltage and current.
Load	The device or devices connected to a voltage source
Short Circuit Current ( $I_{sc}$ )	Current from a PV cell or module to a load of zero or extremely low resistance.
Open Circuit Voltage ( $V_{oc}$ )	Voltage between the positive and negative terminals when there is no load connected to the device. (no current flowing)
IV Curve	A curve produced when plotting current (I) verses voltage (V) for a solar cell or solar cell module
Max power point	The voltage and current at which the maximum power is generated by a solar cell or module
Max power point voltage ( $V_{mp}$ )	The voltage at which the maximum power is generated by a solar cell or module
Max power point current ( $I_{mp}$ )	The current at which the maximum power is generated by a solar cell or module
Global Irradiance (GHI)	Total solar radiation on a horizontal surface
Direct Normal Irradiance (DNI)	Total irradiance coming directly from the sun
Diffuse Horizontal Irradiance (DHI)	Irradiance from the dome of the sky, other than DNI that is incident on a horizontal surface
Zenith Angle	The angle between the sun and the normal to the horizontal surface
Angle of Incidence	The angle between the sun and the normal to a surface