



Reference: الرقم: Date: : التاريخ:

	Apparatus needed for Wind Energy lab	Quantity
1	Torque and speed Meter with load Cell	1
2	3 ph. Squirrel Cage induction Motor 2 and 4 poles	1
3	3 Ph. Synchronous generator 1500-3000 rpm.	1
4	3 Ph. Transformer for step up and step down	1
5	Power supply for single and 3 Ph.	1
6	Multimeter ( Avometer)	10
	DCV: 100 mV-1000	
	ACV: 6 mV-750V	
	DC A: 60uA-50A	
	AC A: 6mA-20A	
	Resistance: 2 m-60 M ohm	
7	Analog and digital oscilloscope(100MHz bandwidth, 1GS/s sampling	1-analoge
	rate and FFT function, 2 channels which are respectively controlled by	2-digital
	independent knobs, Vertical range 2mV/div ~ 10V/div, Trigger: Edge,	
	Pulse, Video, Slope, Overtime, Window, Pattern, Interval, Under Amp,	
	UART, LIN, CAN, SPI, IIC, Can save multiple data formats, Auto	
	measurements with statistics, real-time statistics of maximum,	
	minimum, standard deviation and etc, Display 7 inch or better, USB	
	Host/Device, Passive Probe*2 )	
8	Single-phase fully-controlled bridge rectifier with static and rotating	1
	loads	
9	Single-phase half-controlled bridge rectifier	1
10	Three-phase controlled bridge rectifier	1
11	Characteristic I-V curve for MOSFET	1
12	Characteristic I-V curve for DAIC	1
13	Characteristic I-V curve for TRAIC	1
14	Single-phase ac voltage controller	1
15	Step-down and step-up converter	1
16	Single-phase bridge inverter with static and rotating loads	1
17	Three-phase bridge inverter	1
18	Power supply panel for power electronics	1







