

# IGBT Module Passive Cycling Tester Product Fact Sheet

DYN-PA-19018-V1



Power Assemblies

## 1 General

1.1	Test positions per DUT cubicle	1 test position per standard system.
1.2	Compatible DUT types	Dynex E, N types and others that use same mounting foot print. Heatplate can be customised to accommodate other DUT types.
1.3	Temperature monitoring	The DUT case temperature can be monitored and shown on the computer display in real-time.
1.4	Cooling method	The heatsink is cooled by an integrated water chiller with recirculated water cooled to air. Water cooled chiller options are available.
1.5	Data logging	National Instruments industrial PC with Data Acquisition. Recorded values; Cycle Number, Heating Time, Cooling Time, T <sub>Cmax</sub> and T <sub>Cmin</sub> .

## 2 Electrical

2.1	Power input	220 Vac, 32 Arms, 1ph + E, 50/60Hz
2.2	Maximum test temperature	Up to 175 °C
2.3	Heating power consumption	3 kW
2.4	Chiller power consumption	1.5 kW
2.5	Temperature measurement accuracy	±2 °C

## 3 Mechanical

3.1	Dimensions (W x D x H)	Main Cabinet:	600 x 900 x 1800 mm
3.2	Weight	Approx. 200 kg	
3.3	Coolant type	Distilled water	
3.4	Standard cooling water pipe fitting	3/8" BSP male thread	
3.5	Cooling water flow rate	15 L/min	
3.6	Coolant temperature range	10 °C to 60 °C	
3.7	Audible noise level	< 85 dBa	

<b>4</b>	<b>Operating Conditions</b>	
4.1	Operating location	Indoor use only
4.2	Earthing requirement	Class I Equipment with Earthed Conductor
4.3	Operational temperature	25°C ± 10°C
4.4	Storage temperature	25°C ± 35°C
4.5	Relative humidity	10% to 80%
4.6	Over voltage category	CAT II (laboratory)
4.7	Pollution grade	2 (non-conductive pollution)

<b>5</b>	<b>Safety Features</b>	
5.1	Smoke alarm	Local smoke alarm is fitted to shut down the test equipment in the event of any fumes generated by heat.
5.2	Over-temperature protection	Automatically cut the heater power if the DUT case temperature is above the set protection limit.
5.3	Flow rate failure detection	Test is automatically stopped if no flow rate is detected, chiller also shuts down for protection.
5.4	E-stop push button	E-stop button is fitted to stop the mains power supply in case of an emergency.
5.5	Visible operation indicators	Visible operation indicators are activated during test as a warning aid.

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