Green is life tmg

ABN 43 064 478 842

231 osborne avenue clayton south, vic 3169
PO box 1548, clayton south, vic 3169
t 03 9265 7400 f 03 9558 0875
freecall 1800 680 680
www.tmgtestequipment.com.au

Test & Measurement

- sales
- rentals
- calibration
- repair
- disposal

Complimentary Reference Material

This PDF has been made available as a complimentary service for you to assist in evaluating this model for your testing requirements.

TMG offers a wide range of test equipment solutions, from renting short to long term, buying refurbished and purchasing new. Financing options, such as Financial Rental, and Leasing are also available on application.

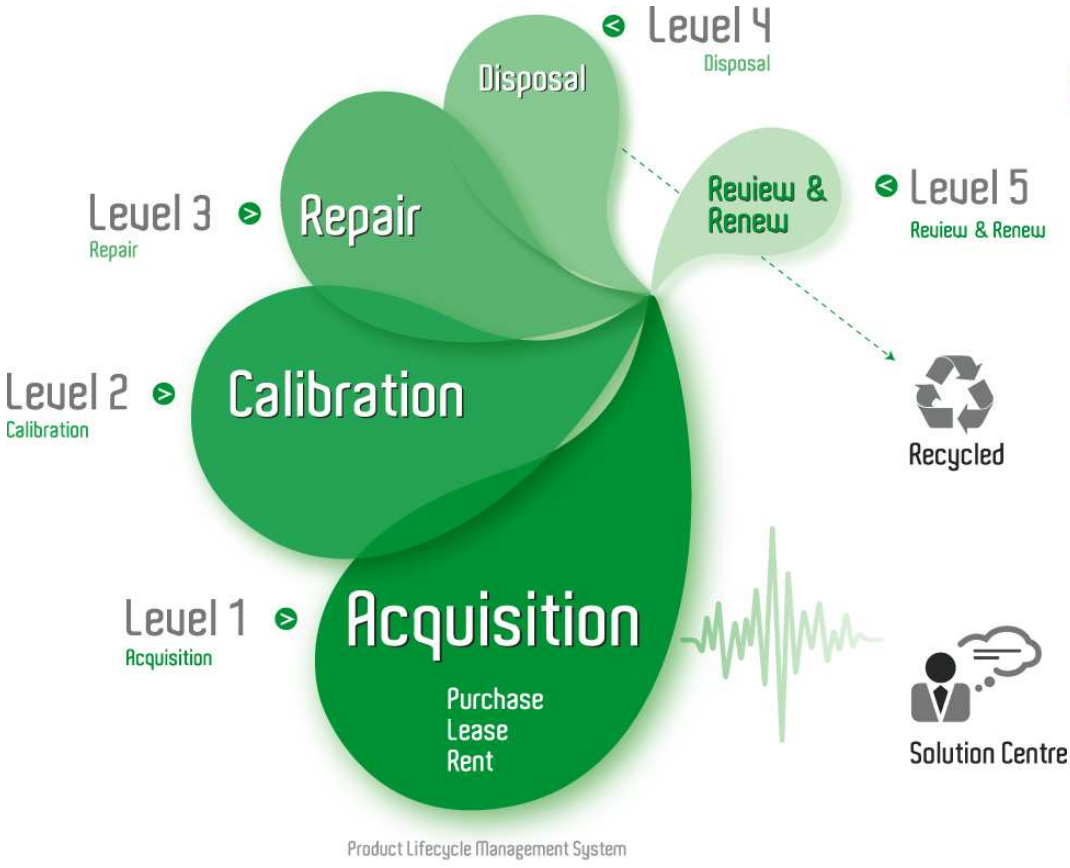
TMG will assist if you are unsure whether this model will suit your requirements.

Call TMG if you need to organise repair and/or calibrate your unit.

If you click on the "Click-to-Call" logo below, you can all us for FREE!

TMG Corporate Website **TMG Products Website**

Click-to-Call
TMG Now



TEK/DTGM32 Output Module Characteristics

Basic Features	DTGM21		DTGM30	DTGM31	DTGM32
Output Channels & Connections	4 single-ended (installed in DTG5078) 2 single-ended (DTG5274 / DTG5334) 4 SMA connectors		2 complementary channels 4 SMA connectors	1 complementary channel 2 SMA connectors	
Maximum Data Rate (Calculated by Transition Time)	700 Mb/s	1.1 Gb/s	3.35 Gb/s		350 Mb/s*[1]
Normal/ Complement (Invert)	Selectable			–	–
Source Impedance	50 ?	50 O/23 O (selectable)	50 ?		
Enable/Disable	Yes (software switch)				
Output Channel Timing					
Transition Times (20 - 80%) (50 ?)	<540 ps (VOL = 0.0, VOH = 1.0) (typical) <1.5 ns (VOL = –1.0, VOH = 2.0) (typical)	<340 ps (VOL = 0.0, VOH = 1.0) (typical) <1.0 ns (VOL = –1.65, VOH = 3.7) (typical)	<95 ps (VOL = 0.0, VOH = 0.1) (typical) <110 ps (VOL = 0.0, VOH = 1.0) (typical)		
Transition Time Control	Yes	No			
Slew Rate Control Range	0.65 V/ns to 1.3 V/ns into 50 ?	–			
Setting Resolution	0.01 V/ns	–			
Channel Output Levels					
Amplitude/ Resolution	0.25 to 3.5 V_{p-p}/5 mV (into 50 ?) 0.50 to 10.0 V_{p-p}/5 mV (into 1 M?)	0.25 to 5.35 V_{p-p}/ 5 mV (from 23 O source impedance into 50 O) 0.25 to 3.9 V_{p-p}/ 5 mV (from 50 O source impedance into 50 O) 0.50 to 7.8 V_{p-p}/ 5 mV (from 50 O source impedance into 1 MO)	0.03 to 1.25 V_{p-p}/5 mV (into 50 ?)*[2] 0.06 to 2.5 V_{p-p}/5 mV (into 1 M?)*[2]		
Output Voltage Window	–1.5 V to 2.0 V (into 50 ?) –3.0 V to 7.0 V (into 1 M?)	–1.65 V to 3.70 V (from 23 O source impedance into 50 O) –1.2 V to 2.7 V (from 50 O source impedance into 50 O) –2.4 V to 5.4 V (from 50 O source impedance into 1 MO)	–2.0 V to 2.47 V (into 50 ?) –2.0 V to 7.0 V (into 1 M?)		
DC Accuracy	(±3% of the set value) ±50 mV into 50 O to GND				
Limit setting	High and low level limits can be set				
Maximum Output Current	±40 mA	±80 mA			
Overshoot	<16% (typical) at High = 1.0 V, Low = 0 V	<15% (typical) at High = 1.0 V, Low = 0 V	<10% (typical) at High = 1.0 V, Low = 0 V		
Typical Support	TTL, CMOS	TTL, CMOS, (P)ECL,	LVDS, CMOS, (P)ECL, LVPECL, CML		

Native Logic		LVPECL			
External Jitter Control	No			Yes	
External Jitter control input channels and connectors				1 single-ended channel 1 SMA connector	2 single-ended channels 2 SMA connectors
Input range				−0.5 V to +0.5 V (typical) Max input: −1.0 V to +1.0 V	−0.5 V to +0.5 V
Jitter Frequency				DC to 250 MHz *3	DC to 50 MHz
Jitter Amplitude				240 ps_{p-p} for 1 V_{p-p} input at Data rate =2.7 Gb/s*4	Range 1: up to 1 ns at 1 V_{p-p} Range 2: up to 2 ns at 1 V_{p-p}
External Tri-state (Hi Z) Control	No	Yes (SMB input connector)	No		
Tri-state Enable	–	Enable: Hi 3.3 V, disable Lo: 0.0 V	–		
Control Channels	–	By output module level	–		
Delay Time from Inhibit In to Data Output	–	Active to Inhibit: 13 ns, Inhibit to Active: 12 ns