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Test & Measurement

- > sales
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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.

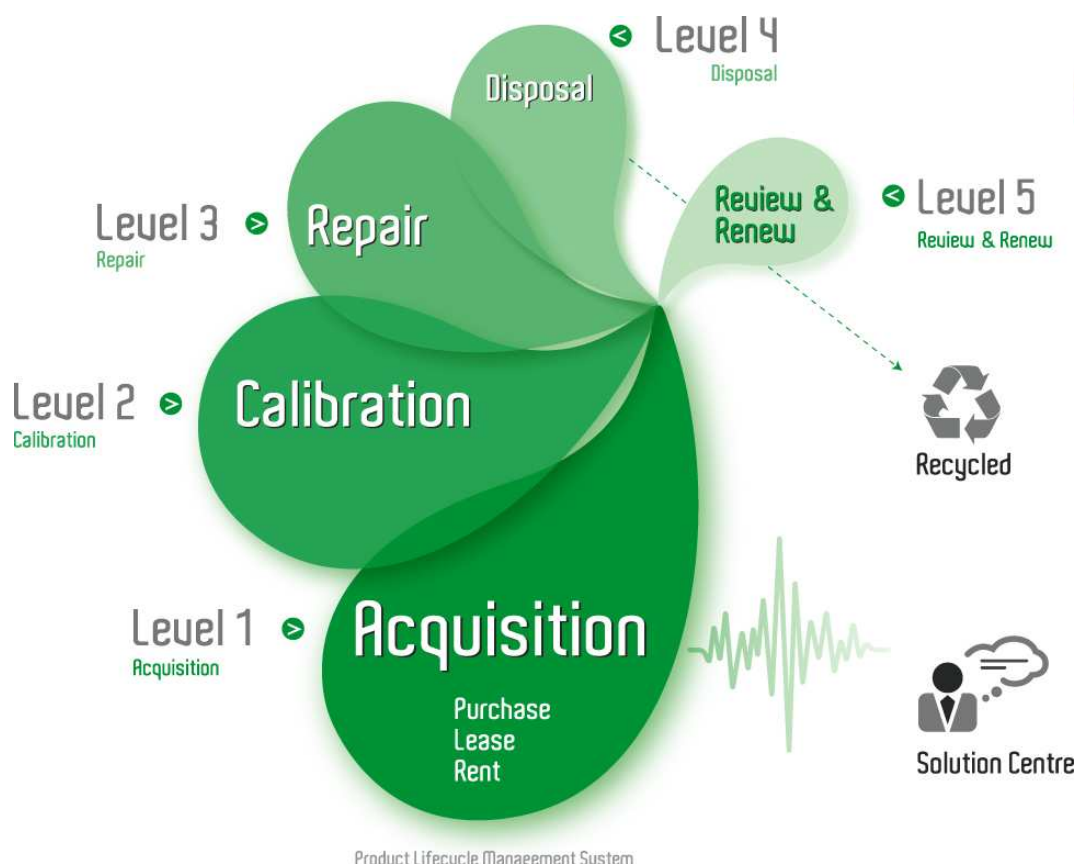
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PCX-MAT MODEL TABLE

MODEL	d-c OUTPUT RANGE		OUTPUT IMPEDANCE			
	VOLTS	AMPS	VOLTAGE MODE SERIES R	CURRENT MODE SERIES L	CURRENT MODE SHUNT R	VOLTAGE MODE SHUNT C
PCX 7-2MAT	0-7	0-2	0.2m Ω	1 μ H	250K Ω	500 μ F
PCX 15-1.5MAT	0-15	0-1.5	0.5m Ω	1 μ H	333K Ω	225 μ F
PCX 21-1MAT	0-21	0-1	1.0m Ω	1 μ H	500K Ω	150 μ F
PCX 40-0.5MAT	0-40	0-0.5	4.0m Ω	1 μ H	1.0M Ω	100 μ F
PCX 72-0.3MAT	0-72	0-0.3	12.0m Ω	1 μ H	1.6M Ω	50 μ F
PCX 100-0.2MAT	0-100	0-0.2	25.0m Ω	1 μ H	2.5M Ω	40 μ F
PCX 200-0.1MAT	0-200	0-0.1	100.0m Ω	1 μ H	10.0M Ω	30 μ F

CC & PCX-MAT GENERAL SPECIFICATIONS

SPECIFICATION	CONDITION	RATING/DESCRIPTION
INPUT		
Voltage	User selectable	105-125/210-250V a-c
Current	Max load, 115V a-c	0.6A rms
Frequency		50-440Hz
OUTPUT		
Current adjustment (PCX-MAT)	0-71°C	0-100% of rating range
Voltage limiting (CC)	Fixed	150-200% of rated load compliance voltage
Error sense (PCX-MAT)	Static voltage allowance	0.5V per load wire
Voltage recovery	Step load change between 10% and 100% I_o max	50 μ sec typ, 100 μ sec max
Isolation voltage	Output to ground	500V d-c or peak
Leakage current, Output to ground	rms at 115V a-c	5 microamperes
	p-p at 115V a-c	50 microamperes
Series connection (PCX-MAT)	Max voltage off ground	500V
Parallel connection	—	No restrictions
OVP	—	Not available

CC & PCX-MAT GENERAL SPECIFICATIONS

SPECIFICATION	CONDITION	RATING/DESCRIPTION
CONTROL		
Type (PCX-MAT)	Voltage	Fixed input, variable gain
Voltage (PCX-MAT)	Local	10-turn precision rheostat
	Remote analog	1000 Ohms/Volt or by control voltage delivering 0-1mA
	Remote digital	Use SN digital to analog converter
Type (CC)	Current	Fixed ref. variable gain
Current (CC)	Local	10-turn precision rheostat
	Remote analog	0-10,000 Ohm resistor, or by control voltage delivering 0-100 μ A
Dynamics Programming speed		$dV/dt=I/C$ (see tabulated C) in the model table
MECHANICAL		
Input/output connections	Source power, d-c output, sense, & control terminals	Male PC connector mates with built-in socket in bench or rack housing
	Output monitoring	Front panel
Meters	Front panel analog	Two 2" \pm 3% horizontal
Indicators	One neon	Power on
Mounting	See Mounting	Fits in single slot of rack or bench housing
Cooling	Convection	Top surface
Dimensions (H x W x D)	Inches	5 $\frac{7}{32}$ x 2 $\frac{25}{32}$ x 14 $\frac{15}{16}$
	mm	132.6 x 70.6 x 379.4
Finish; Fed Std 595	Front panel	Gray color 26440
Weight	Packed for shipment	8lbs (3.6Kg)

STATIC SPECIFICATIONS

INFLUENCE QUANTITY	
Source: 105-125/210-250V a.c	
Load: 10% load - 100% load	
Time: 8 hours (drift)	
Temperature: Per °C	
Ripple and Noise ⁽²⁾	rms pp ⁽³⁾

PCX-MAT

OUTPUT EFFECTS VOLTAGE MODE	VOLTAGE AMPLIFIER OFFSETS		VOLTAGE REFERENCE (INTERNAL)
	ΔE_o	ΔI_o	
<0.0005%	<10 μ V	<2nA	0.0001%
<0.005% or 0.2mV ⁽¹⁾	<200 μ V	<6nA	—
<0.01% or 1mV ⁽¹⁾	<20 μ V	<2nA	0.005%
<0.01% ⁽⁴⁾	<20 μ V	<5nA	0.005%
<0.1mV	—	—	—
<3mV	—	—	—

Fractional dimensions in light face type are in inches, dimensions in bold face type are in millimeters.

Tolerance: $\pm 1/64$ " (0.4) between mounting holes; $\pm 1/32$ " (0.8) other dimensions

