



Q-METER



DESIGN AND PRODUCTION OF
INSTRUMENTS AND APPARATUS
FOR QUALITY CONTROL
ON MATERIALS



These instruments are made in
compliance with CE health and
safety requirements



Scope

These test methods cover the determination of relative permittivity, dissipation factor, loss index, power factor, phase angle, and loss angle of specimen of solid electrical insulating materials when the standards used are lumped impedances. This completely new instrument has been designed to meet laboratory and manufacturing requirements as well as incoming inspections. To determine the dielectric constant (ϵ_r) and the angle loss ($\tan \delta$) on samples such as sheets with different thicknesses between 0 to 0.5 cm at a frequency of 1 MHz.

Standards

Designed and built to meet the following standards:
ASTM D 150, ASTM D 669, DIN 53483/B2, UNI 4289
and other equivalents.

Technical description and features

The model code 6132.000 is a desk-top instrument able to take direct reading. The use of the device is simple and the measurement operations consist of positioning the sample, mechanically adjusting the probe, reading the results and applying the appropriate correction formula. There are also LEDs showing when full scale values have been exceeded and a two position switch: the latter in order to select two different full scale values for capacitance measurement.

Technical data			
Working frequency	1 MHz		
Test tension on specimens	1 Veff		
Two measurement fields of capacity	5...50pF	Resolution 0.1 pF	
	50...500 pF	Resolution 1 pF	
Maximum error of capacity	1% of reading +0.5 pF		
Measurement field of $\tan \delta$	0...1	Resolution 0.001	
Maximum error of $\tan \delta$	5% of reading +0.005		
Electrodes available according to the following standards			
ASTM D 150	code 6137.002	ASTM D 669	code 6137.002
UNI 4289	code 6137.002	DIN 53483	code 6137.001
and others on request.			

Technical Characteristics		
	Control unit	Electrode box
Overall dimensions (L x D x H)[mm]	210 x 440 x 130	220 x 310 x 90
Weight [kg]	4.5	2
Supply	230 V - 50/60 Hz - Singlephase (110 V on request)	
Power [W]	20	
Paint	fuchsia RAL 4006 - Gray RAL 7035	

"Due to the continuous development policy of CEAST's Research and Development Department, changes may be introduced without notice"



www.ceast.com



CEAST S.p.A.

• Via Airauda, 12 • 10044 Pianezza (TO) Italy
• Tel: (+39) 011.966.40.38 (10 lines) • Fax: (+39) 011.966.29.02
E-MAIL: Int. Sales: InfItaly@ceast.com - Int. after sales: aftersalestech@ceast.com

CEAST USA Inc.

• 4816 Sirius Lane, Charlotte, NC 28208
• Tel. 704-423-0042 • Fax 704-423-0081
E-MAIL: USA Sales: salesusa@ceast.com - USA Service: Keith@ceast.com

CEAST GmbH

• Bunsenstr. 5, D-82152 Martinsried
• Tel. ++49 (0) 89/85 90 28 12 - 89 50 18 10 • Fax ++49 (0) 89/89 94 98 51
E-MAIL: Sales and Service: info.germany@ceast.com