





DESIGNATION	DIGITAL LOSS FACTOR ANALYSER - Standard accuracy -				DIGITAL LOSS FACTOR ANALYSER - Medium accuracy -				DIGITAL LOSS FACTOR ANALYSER - High accuracy -			
Vettiner References	AFP 400				AFP 500				AFP 600			
 <p><b>Dimensions &amp; Weight</b></p> <ul style="list-style-type: none"> <li>Width (mm)</li> <li>Depth (mm)</li> <li>Height (mm)</li> <li>Weight (Kg)</li> </ul> <p><b>Software screenshot</b></p> <ul style="list-style-type: none"> <li>under Windows</li> <li>Ref. Tan d PC2 Soft</li> </ul>	<p><i>Carrying case</i></p>  <p>465 mm 370 mm 175 mm # 15 kg</p>				<p>Available in <i>Carrying case</i> (black or Yellow) OR <i>Rack case</i></p> <p><i>Rack case</i></p> 				 <p>520 mm ( Rack case 19") 400 mm (Rack case 360 mm) 200 mm (Rack case 4 U) # 20 kg</p>			
<p><b>Field of application (Not exhaustive)</b></p> <ul style="list-style-type: none"> <li>Dielectric insulation qualification / status</li> <li>Power / Instrument Transformers insulation</li> <li>Generators / bars insulation</li> <li>Coils insulation</li> <li>Cable insulation</li> <li>Power Capacitors insulation</li> <li>Liquid / solid dielectric samples</li> <li>All HV equipments insulation</li> <li>Laboratories, Production &amp; Maintenance</li> </ul>												
<p><b>Main Characteristics</b></p> <ul style="list-style-type: none"> <li>Technology</li> <li>Measuring Modes</li> <li>Balancing Modes</li> </ul>					<p>Vectorial Measuring Structure UST, GST &amp; GSTg Automatic</p>							
<p><b>Main Measured Values (All displayed)</b></p> <ul style="list-style-type: none"> <li>Voltage (*)</li> <li>Current (*)</li> <li>Frequency (*)</li> <li>Capacitance (*)</li> <li>Tan Delta - Tan d (*)</li> <li>P. factor - cos f</li> <li>Watt Loss</li> <li>Permittivity - εr</li> </ul>	<p><b>Ranges</b></p> <p>0-2kV or...5kV 0-20 mA &amp; + 45-65 Hz &amp; + 0-32 nF &amp; + 0-100 % &amp; + 0-1 0-100 kW 0-30</p>	<p><b>Display</b></p> <p>4 dgts. 3 dgts. 3 dgts. 4 dgts. 5 dgts. 3 dgts. 4 dgts. 3 dgts.</p>	<p><b>Resolution</b></p> <p>1 V 0.1 μA 0.1 Hz 0.01 pF <math>10^{-4}</math>-100 pF 0.01</p>	<p><b>Accuracy</b></p> <p>1.0 % ± 1 dgt 1.0 % ± 1 dgt 0.1 % ± 1 dgt 0.5 % ± 1 dgt <math>1.0\% \pm 1.10^{-3}</math> 1.5 % ± 1 dgt 1.5 % ± 1 dgt 1.5 % ± 1 dgt</p>	<p><b>Ranges</b></p> <p>0-2kV or...5kV 0-20 mA &amp; + 45-65 Hz &amp; + 0-32 nF &amp; + 0-100 % &amp; + 0-1 0-100 kW 0-30</p>	<p><b>Display</b></p> <p>4 dgts. 3 dgts. 4 dgts. 4 dgts. 5 dgts. 3 dgts. 4 dgts. 4 dgts.</p>	<p><b>Resolution</b></p> <p>1 V 0.1 μA 0.01 Hz 0.01 pF <math>10^{-4}</math>-100 pF 0.01</p>	<p><b>Accuracy</b></p> <p>1.0 % ± 1 dgt 1.0 % ± 1 dgt 0.01 % ± 1 dgt 0.3 % ± 5 dgts <math>0.5\% \pm 5.10^{-4}</math> 1.0 % ± 1 dgt 1.0 % ± 1 dgt 1.0 % ± 1 dgt</p>	<p><b>Ranges</b></p> <p>0-2kV or...5kV 0-20 mA &amp; + 45-65 Hz &amp; + 0-32 nF &amp; + 0-100 % &amp; + 0-1 0-100 kW 0-30</p>	<p><b>Display</b></p> <p>5 dgts. 4 dgts. 4 dgts. 5 dgts. 6 dgts. 4 dgts. 4 dgts. 4 dgts.</p>	<p><b>Resolution</b></p> <p>0.1 V 10 nA 0.01 Hz 0.01 pF <math>1.10^{-3}</math>(10 pF) 0.001 1 μW 0.001</p>	<p><b>Accuracy</b></p> <p>0.5 % ± 5 dgts 0.5 % ± 5 dgts 0.01 % ± 1 dgt 0.1 % ± 5 dgts <math>0.5\% \pm 1.10^{-3}</math> 0.5 % ± 1 dgt 1.0 % ± 1 dgt 0.5 % ± 1 dgt</p>
<p><b>Other Tests or interfaces</b></p> <ul style="list-style-type: none"> <li>Ambient Temperature T °C &amp; Hydro %</li> <li>Option : Local Temp. T°C/PT100, Resistivity r</li> <li>Software to drive tests, manage tests results...</li> <li>Interface : RS 232, USB for results storage or printer...</li> </ul>												
<p><b>Vettiner Benefit for Customers</b></p> <ul style="list-style-type: none"> <li>Vettiner : Tan d Test since over 86 years (1933)</li> <li>Tan d in HV/Vettiner among world longest experience</li> <li>Vettiner AFP - Almost instantaneous Measurements</li> <li>HMI 10" Touch screen PC Control &amp; sturdy pcontoller t</li> <li>Essay use, very intuitive, &amp; built-in interactive manual</li> <li>PC Benefits &amp; Built-in Excel &amp; PDF conversion</li> <li>Calibration : Easy check &amp; easy calibration</li> <li>No or reduced maintenance over time</li> <li>Sturdiness &amp; reliability over time</li> <li>Total operator safety &amp; ease of use</li> <li>Warranty</li> <li>After Sales Service</li> </ul>					<p>Vettiner - Over 88 years of experience in Tan d tests Vettiner Schering Bridges - Most accurate Tan d test in HV Measurements achieved in # 1 second</p>							
<p><b>Eventual Accessories or Options</b></p> <ul style="list-style-type: none"> <li>Connection Terminals</li> <li>Measuring cables - XX m under request</li> <li>Measure &amp; display of local Temp.</li> <li>Measure &amp; display of resistivity r in DC</li> <li>Additional shunt or CT / high current tests</li> <li>Special protection / proof container</li> <li>Std Capacitor Cn / Divider included</li> <li>HV Generator, included or separated</li> <li>Sample test cell, liquids or solids</li> <li>Heating Control for self heating test cells</li> <li>Eventual training</li> <li>Eventual on site setting up</li> <li>Eventual other requests</li> </ul>	<p>SCT</p> <p>TCA AFP XX</p> <p>PT/AFP</p> <p>r/AFP</p> <p>SS XX</p> <p>AFP PPACK</p> <p>SD/CS/CG</p> <p>AL XX-YY</p> <p>SCL/SCS</p> <p>SC/SH</p> <p>TRAIN</p> <p>INSTAL.</p> <p>EOR</p>					<p>UHF without any request</p> <p>Length to be agreed</p> <p>According to application</p> <p>According to application</p> <p>According to application</p> <p>To be agreed</p> <p>2 or 5 kV</p> <p>2 or 5 kV / 20 mA</p> <p>To be agreed</p> <p>To be agreed</p> <p>To be agreed, free in our premises</p> <p>To be agreed</p> <p>To be agreed, Ex : On site tests</p>	<p>Lemo under simple request</p> <p>XX m under request</p> <p>To be agreed under request</p> <p>To be agreed under request</p> <p>To be agreed under request</p> <p>Under request</p> <p>To be agreed under request</p> <p>To be agreed under request</p> <p>Under request</p> <p>Under request</p> <p>Under request</p> <p>Under request</p> <p>Under request</p>					
<p><b>Environment</b></p> <ul style="list-style-type: none"> <li>Operating Temperature</li> <li>Storage Temperature</li> </ul>									<p>-0 °C up to + 40 °C - 20 °C up to + 60 °C</p>			
<p><b>Calibration</b></p> <ul style="list-style-type: none"> <li>Vettiner calibration certificate included (BNM Traceat</li> <li>External laboratory calibration (ISO17025, ...)</li> </ul>									<p>Under request</p>			

Some of the above technical data are valid at the above mentioned date but could change without any notice at any time (Ex. dimensions or weight or else...)

\* Better on request

