

SPECIFICATIONS ET-100, ET-10, 410-DHR

ET-100 included in 410 Vis-IR Package.

	ET-100	ET-10	410-DHR
MEASURED DATA			
<i>Measured Parameter</i>	Directional hemispherical reflectance (DHR)		
<i>Method</i>	Integrated total reflectance in a band for a given angle of incidence		
<i>Measured Value</i>	Absolute reflectance (0-1)		
<i>Calculated Value</i>	Directional thermal emissivity at 20°, directional thermal emissivity at 60°, hemispherical thermal emissivity	Directional thermal emissivity at 20°	In-band emissivity
<i>Wavelength Bands (microns)</i>	1.5-2.0, 2.0-3.5, 3.0-4.0, 4.0-5.0, 5.0-10.5, 10.5-21	3.0-5.0, 8.0-12.0	9-1.1, 1.9-2.4, 3.0-4.0, 3.0-5.0, 4.0-5.0, 8.0-12.0
<i>Angle of Incidence</i>	20° & 60° from normal incidence	20° from normal incidence	20° & 60° from normal incidence
<i>ASTM Standards</i>	E903		
<i>Calibration Coupon</i>	Specular Gold		
PERFORMANCE			
<i>Accuracy</i>	+/- .03		
<i>Repeatability</i>	±.005 units		
<i>Beam Spot Size</i>	0.50 inches		
<i>Measurement Time</i>	10 sec	7 sec	10 sec
<i>Sample Size & Geometry</i>	Flat: ≥ 0.5 in. diameter Curved: 6 in. convex; 12 in. concave		
<i>Warm Up Time</i>	90 seconds		
<i>Time Between Measurements</i>	2 seconds		
<i>Sample Temperature</i>	Ambient or heated/cooled to 0 - 100° C		
<i>Operating Temp</i>	0° to 40° C		
POWER			
<i>Run Time</i>	2 hours on one battery. Battery easily replaced with continuous operation after battery replacement.		
<i>Power Source</i>	Rechargeable battery (standard environmentally friendly NiMH)		
<i>Battery Recharge Time</i>	1 hour		
<i>IR Source</i>	Kanthal filament operated at about 1,000°C		
ENVIRONMENT			
<i>Storage</i>	-25° to 70°C		
<i>Operating</i>	0° to 40° C		
DIMENSIONS			
<i>Weight</i>	4.7 lbs		
<i>Form Factor/Size</i>	H 11.54", L 9.04", W 3.27" (29.31 cm x 22.96 cm x 9.44 cm)		
INTERFACE			
<i>Operator Interface</i>	LCD graphics screen, 1/4 VGA, touch screen, software buttons; trigger switch in handle		
<i>Inspection Applications</i>	Pass/fail can be incorporated, user set values		
<i>Diagnostics</i>	On screen status and signals monitor. Signal values stored with data. Raw data collection and display.		
MISCELLANEOUS			
<i>Date Format</i>	Data files can be opened and post processed with Excel or a text processor		
<i>Data Storage</i>	Removable SanDisk (SD) card		
<i>Export control</i>	ECCN #3A999.F		