

Centurion® TK40 & WinCem®
Infrared Kiln Shell Scanning System



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PERFORMANCE

Scanning Rate	10Hz
Scanning Field of View	120°
Linear Samples per Scan	1024
Aperture	25mm
Focus	1m to Infinity
Temperature Range	100-700°C
Filter	Atmospheric
Spectral Range	3.3µm-4.2µm
Spatial Resolution:	
Spot Detection (50% modulation)	<2 mrad
Temperature Measurement (90% modulation)	<4 mrad
Thermal Sensitivity	± 1.6°C at 100°C
Accuracy	± 4°C at 100-250°C <1% at 250-700°C
Repeatability: Short term	<1°C
Long term	± 5°C (One calibration per year)
Scanline Stability	± 0.1°
Detector Type	Mercury Cadmium Telluride
Micro Blackbodies: Ref. 1	Internal Low Temp
Ref. 2	Internal High Temp (250°C)

SIGNAL PROCESSING

Digitisation	PosiTrak® Geometric Linearisation
Electronic Processing	22 bits per sample

PC INTERFACING SOFTWARE PC/COMPUTER

Windows 10 or later	✓
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EMBEDDED SOFTWARE

Real Time Measurement, Alarms, Zones, Cursor, Max/Min/Mean Alarm, Processing, Temperature Maps, Spot Area Processing, Diagnostics, Interfacing, Temperature vs Time Trending with Trend on Alarm, Profile/Envelope, 2D Image Map, Worst Case History, Historical Playback/VCR, Data/Image Subtraction, Optional Tyre Slip Measurement/Alarms, Event Log Manager, Multiple Layout Configurations, Layout Manager, Simultaneous Line Display/Measurement/Recall Data

ENVIRONMENTAL DETAILS

Operating Temperature Range	- 10°C to + 50°C (Standard) - 40°C to + 70°C (Optional)
Operating Ambient Relative Humidity (non-condensing)	100% RH at + 40°C
Enclosure Classification	IP65
Size (W x H x D) mm	200 x 183 x 71
Scanner Weight	3.5 Kg
Integral Power Supply	100-240V 50-60Hz
Power Consumption	24 Watts

SYSTEM

Air Purge
Heavy Duty Blower Fan
Fan Filter Pack
including Flow Indicator
Mounting Cradle Assembly
Power & Communications Unit
PC Interface Unit
Kiln Synchronisation/Tyre Slip Actuator Switch
Heavy Duty ABS Shipping Case
Desktop PC (with LCD screen, keyboard and mouse)

OPTIONAL ACCESSORIES

WinCem Graphic Professional (3D) Software
Tyre Slip Software
WinBrix Refractory Expert
Remote I/O Module
OPC Interfacing Software
Client-Server Network Software
Alignment Telescope
Rack-mounted PC

COMMUNICATIONS

Multimode fibre optic cable kit - 62.5/125µm with ST terminations

WARRANTY

24 Months Standard



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March 2019 Print Out



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