

SIR 3



OPTICAL

Number of Channels	1
Lenses	Nikon F-mount (ruggedized mounting system)
System Aperture	f 2
Shutter	Electro-mechanical
Distortion	Nominally zero
Coupling	CCD to MCP via FO
Vignetting	<3%
Intensity variation	Better than 5% across the image
Optical Viewfinder	Optional

INTENSIFIER/CCD

	SIR3-18D	SIR3-25D	SIR3-40D
Image Sensor	KAI11002M	KAI4021M	KAI4021M
Active CCD Pixel	4008 (H) x 2688 (V)	2048 (H) x 2048 (V)	2048 (H) x 2048 (V)
Pixel Size	9µm (H) x 9µm (V)	7.4 µm (H) x 7.4 µm (V)	7.4 µm (H) x 7.4 µm (V)
Dynamic Range	12 bits	12 bits	12 bits

TIMING PARAMETERS

System Clock	100MHz quartz crystal controlled.
Inherent Delay	<130ns
Imaging Mode	Single or Double image
Exposure Modes (each image)	Single exposure or multiple exposures (Max. 16 - subject to imaging conditions).
Exposure Times	10ns – 10ms in 10ns steps independently variable
Delay to 1st exposure	130ns – 10ms in 10ns steps independently variable
Flash output	20ns to 1ms in 10ns steps independently variable
Separation	30ns to 20ms in 10ns steps independently variable

INPUT/OUTPUT SIGNALS

Trigger 1	Electrical signal (BNC connector) Threshold variable from ± 25V Positive or Negative polarity, Make/Break 50Ω or 1KΩ termination
Trigger 2	Electrical signal (BNC connector) Threshold variable from ± 25V Positive or Negative polarity, Make/Break 50Ω or 1KΩ termination
Flash Trigger Output	Pulse width (min. 10ns) and position user programmable. TTL into 50Ω
Camera Interface	Data and command transfer via Gigabit Ethernet Cable length 100m (standard) 1000FX fibre optic Ethernet link (up to 2Km) - optional
Software	Custom software compatible with Microsoft Windows Operating Systems for camera control, image data archiving in various file formats.

ENVIRONMENTAL

Storage temperature	-10°C to +50°C
Operating temperature	-5°C to +40°C
Humidity	10—90% RH non condensing
Vibration shock	10—40 Hz Max. 10g in any direction
EMC	Meets all EC harmonised standards



BS EN ISO9001:2000 FM 87429