

DISCOVERY Plus – DX Series



We have developed the new version of DISCOVERY: the Plus DX series!

It maintains the characteristics of the former DS series: high sensitivity, reduced weight and dimensions and low costs. Moreover it offers you a USB connection, a selectable 12, 14, 16 bit A/D converter digitization and more!

Every component is integrated in the aluminium head: CCD, electromechanical shutter, Peltier cooling system, electronics.

You can choose between the standard cooling version: Single stage Peltier reaching up 35 °C below ambient and the enhanced cooling version: Double stage Peltier reaching up 45 °C below ambient.

DISCOVERY DX series will offer you professional performances at cheap costs.

This series uses Kodak KAF CCD sensors, displaying a wide range of resolutions and pixel dimensions. The sensors are front-illuminated, supported by an excellent quantum efficiency. Among the main application fields: Astronomy, Plasma Physics

SPECIFICATIONS

MODEL	CCD	ARRAY FORMAT (HxV)	PIXEL (HxV) µm	SIZE (HxV) mm	FWC ke ⁻	DARK CURRENT e ⁻ /pixel-s @ - 5°C	QE @ 450, 550, 650 nm	FILL FACTO R %
DX-260E	KAF-0261E	512x512	20x20	10.2x10.2	500	12.5	35, 55, 58	100
DX-400LE	KAF-0401LE	768x512	9x9	6.9x4.6	100	0.5	20, 35, 42	70
DX-400E DX-400ME	KAF-0402E KAF-0402ME	768x512	9x9	6.9x4.6	100	0.5	35, 55, 68 55, 67, 82	100
DX-1600E DX-1600LE	KAF-1602E KAF-1602LE	1536x1024	9x9	13.8x9.2	100 50	0.6 0.5	40, 50, 60 20, 35, 42	100 70
DX-1600ME	KAF-1603ME	1536x1024	9x9	13.8x9.2	100	0.6	50, 67, 75	100
DX-3200E DX-3200ME	KAF-3200E KAF-3200ME	2184x1472	6.8x6.8	14.85x10.26	55	0.5	40, 52, 65 60, 75, 82	100

*“E” is the Enhanced (ITO) version, “LE” is the Antiblooming version, “ME” stands for Micro Lenses.
The values concerning Quantum Efficiency, Full Well Capacity and Dark Current have to be considered as typical.*

DTA s.r.l.

web site: www.dta.it - e-mail: sales@dta.it Distributor in Israel www.ILPHotonics.com

Tel. +39 (0) 50 711126 Fax +39 (0) 50 715347

DISCOVERY Plus – DX Series

Readout speed	Up to 420 kpixel/s	Filter wheel (opt)	external
A/D Converter	Selectable 12, 14, 16 bit	Max total noise (Typ)**	15e ⁻
Partial CCD reading	Programmable	Binning	from 1x1 to 8x8 or arbitrary
Interface	USB 1.1/2.0	Mount	C
Spectral response	350-1000 nm	Backfocus	17.5 mm
Cooling	Single stage Peltier 35 °C ΔT) Double stage Peltier 45 °C ΔT (on request)	Shutter	Electromechanical
Exposure time	From 0.1 to 9999 s	CCD temperature control	±0.1 °C
Settable gains	64	BIAS Control	9 bit
Optical window *	Fused silica, 1mm	Weight	800 g
Dimensions	Φ 118x53 mm	Auxiliary port	yes

* With double coating. On request, it can mount coating and/or double coating windows with non parallel faces and windows in Beryllium with X-ray scintillator screen

** According to sensors

THE STANDARD SYSTEM INCLUDES:

- assembled unit in light alloy with threaded C input;
- 1.8 m USB link cable;
- software for image grab and processing under Windows Me/2000/XP/VISTA;
- 230/115 V power supply (optional, not included);
- case, manual with test report and 24 months of warranty.

OPTIONS

NIK-A	Adapter for Nikon lens
MIN-A	Adapter for 42x1 mm lens
TBR	Adapter for T mount 42x0.7 mm
M10P	10 m parallel link cable for parallel port
M2P	10 m link cable for PCI interface
DSC-1	Double stage Peltier 45°C ΔT
PWR-X	Stabilized power supply 230V; 13.8V; 5A
APW	Battery adapter for cars

DTA s.r.l.

web site: www.dta.it - e-mail: sales@dta.it

Tel. +39 (0) 50 711126 Fax +39 (0) 50 715347