



## High-Speed, High-Quality Imaging

### Standard Set

#### *i-SPEED 2 camera*

Getting started guide

PC software - Control

Transport case

*i-SPEED 2* feature connector cable

Pickle switch

USB CF card reader

Ethernet crossover cable

Composite video cable

Power supply

Mains cable x 3 (UK, USA/Japan, Europe)

Case strap

Instructions

Controller Display Unit (CDU) is a recommended accessory

### Models

Each camera is available as a colour unit and has a selectable internal memory size.

#### Memory size

2 GB Monochrome

4 GB Monochrome/HG

2 GB Colour

4 GB Colour/HG

#### Record time at full resolution

4.50 seconds

9.00 seconds

4.50 seconds

9.00 seconds

Memory upgrade is available between units

### Features

Resolution

Maximum Frame Rate

Shutter

Image Processing

Image Manipulation

Measurement

Triggering

Synchronisation

Image Storage Formats

Security Secure

Data

GPS/IRIG Module

800 x 600 @ 1,000 fps

33,000 fps

5  $\mu$ s

Process images before saving via on board editing suite

Zoom/Pan/Select region of interest

On board analysis function enabling measurement of distance, speed, acceleration, angle

0-5 V TTL, ROC, BROG

Phase lock enables multiple cameras to be synchronised

AVI/MJPEG

Once powered down, the camera does not retain video images  
x 2 channels of analogue data synchronised with video images.  
Sample rate selectable to 100 KHz

Synchronise cameras to IRIG/NASA generators or to Global Positioning Satellites

## Operation

Cameras may be operated as stand-alone units with the patented\* CDU or by PC via Ethernet connection (see software sheet)

Dimensions	115 mm (W) x 110 mm (H) x 233 mm (L)
Weight	2 kg
Input Voltage	12 V $\pm$ 10%
Power Consumption	36 W maximum
Mounting	5 x 1/4" Whitworth threads
Lens Mounting	C-Mount

## Image Sensor

Sensor Type	Custom CMOS
Resolution	800 x 600
Sensor Size	14 mm (diagonal) 8.4 mm x 11.2 mm
Pixel Size	14 micron
Aspect Ratio	4:3
Shutter	5 $\mu$ s
Bit Depth	8 bit

## Regulatory Compliance

EMC	CISPR22 (BS EN55022) CISPR24 (BS EN55024)
Safety	BS EN61010-1
CE Marking	EMC Directive (Camera), LV Directive and EMC Directive (Power Supply)
Lead Free	RoHS Directive
WEEE	Compliant
IP Rating	IP 20
IMERC (CDU)	Contains mercury, dispose according to local, state or federal laws

## Operating Environment

Temperature	0 °C to +40 °C operation -20 °C to +60 °C storage
Pressure	71 kpa to 106 kpa
Relative Humidity	95% at 40 °C non-condensing

## G Rating

HG Cameras	100 G @ 11 milliseconds	IEC 68-2-27 Ea
	100 G @ 2 milliseconds	IEC 68-2-29 Eb

## Storage Case

Dimensions	535 mm (W) x 430 mm (H) x 210 mm (L)
Weight	4.70 kg without contents

## CDU

Dimensions	267 mm (W) x 210 mm (H) x 43 mm (L)
Weight	1.25 kg
Display	8.4" LCD Daylight viewing
Input Voltage	12 V $\pm$ 10%
Power Consumption	8 W maximum

Note: Product contains Mercury, please dispose of in accordance with local, state and federal laws.

## i-SPEED 2 - 2 GB Internal Memory

Frames per Second	Resolution	Frames in Memory	Record Time (s)
1	800 x 600	4,473	4473.000
25	800 x 600	4,473	178.920
100	800 x 600	4,473	44.730
150	800 x 600	4,473	29.820
200	800 x 600	4,473	22.370
300	800 x 600	4,473	14.910
400	800 x 600	4,473	11.180
500	800 x 600	4,473	8.950
1,000	800 x 600	4,473	4.470
1,500	672 x 504	6,340	4.230
2,000	576 x 432	8,630	4.320
3,000	448 x 336	14,266	4.760
4,000	384 x 288	19,418	4.850
5,000	320 x 240	27,962	5.590
10,000	224 x 168	57,065	5.710
15,000	160 x 120	111,848	7.460
20,000	128 x 96	174,762	8.740
33,000	96 x 72	310,689	9.410

Note: Record time is directly proportional to memory size

\*The CDU is patented in the UK, patents pending in other markets

OLYMPUS NDT INC. is ISO 9001 and 14001 certified.

**OLYMPUS**

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i-SPEED 2: Issue 2: 5049806/0113