

Leica RCD30 Oblique

Life from a different angle – enhanced resolution

3D
MODELLING



High accuracy oblique imaging

The Leica RCD30 Oblique flexible penta head was specifically designed for high accuracy 3D urban and corridor mapping applications. Its unique photogrammetric design features superior image quality and maximum flexibility by offering a choice of the CH81 RGB only and CH82 multispectral RGBN 80 MP camera heads.



Ruggedised design & easy aircraft installation

Lens protection against environmental impacts, like water and dust, make the Leica RCD30 Oblique especially ruggedised for photogrammetric applications and high geometric accuracy. The sensor comes in two penta pot lengths and lifter for flexible aircraft installation inside the Leica PAV100 gyro-stabilised mount.



Advanced 3D city modelling workflow

Leica RealCity is a complete and fully integrated workflow solution from mission planning to post-processing. It features full 3D city modelling, texture mapping and 3D editing and can further be upgraded to suit your needs. Combined with the high resolution optics of the Leica RCD30 Oblique, it provides accurate building detail.

Leica RCD30 Oblique product specifications

SENSOR CHARACTERISTICS CAMERA HEAD CH8X

CCD size (80MP)	10320 x 7752 pixels
Pixel size (80MP)	5.2 µm
Dynamic range of CCD	73 dB
Resolution A/D converter	14-bit
Data channel	16-bit lossless compressed
Maximum frame rate (penta)	1.5 sec
Motion compensation	Mechanical, bi-directional
Spectral range	CH81RGB
Spectral range	CH82RGB and NIR (780 – 880 nm), coregistered
Weight (w/o lens)	3.1 kg
Dimensions	Height 168 mm, diameter 128 mm

OPTICS CAMERA HEAD CH8X

Lenses	
Leica NAG-D 50mm	Weight 0.8 kg, height 91 mm
Leica NAT-D 80mm	Weight 0.5 kg, height 46 mm
Leica SAT-D 150mm	Weight 0.8 kg, height 95 mm
	High accuracy performance between -10 °C and + 30 °C
Shutter	Central shutter, user replaceable (~ 200,000+ frames)
Aperture	Automatically controlled aperture 4, 5.6, 8, 11 for NAG-D 50 mm 2.8, 4, 5.6, 8 for NAT-D 80 mm 4, 5.6, 8, 11 for SAT-D 150 mm
Lens mount	Precise bayonet connection, automated electrical connection, stabilised connection mechanics
IMU selection	SPAN CNU55, no export license required US ECCN 7A994

CAMERA CONTROLLER CC32

Weight (w/o MM30)	6.1 kg
Dimensions L x W x H	300 mm x 260 mm x 140 mm
Capacity	Controls up to 5 CH8 x Includes deeply coupled GNSS/IMU solution
Processor	64-bit WIN7, 8 GB RAM, 32 GB flash, USB 2.0, SATA
Mass memory	MM30 Solid state available in 600 GB and 1,600 GB CC32 holds up to 2 MM30s Weight 0.5 kg Removable & portable
Mass memory capacity	Joint MM30 1,600GB 42,100 RGB, 33,600 RGBN images Joint MM30 600GB 15,000 RGB, 12,600 RGBN images

ELECTRICAL

Average power consumption of Leica RCD30 Penta	465 W / 28 VDC
Maximum peak power consumption of Leica RCD30 Penta	~ 770 W / 28 VDC < 0.3 s

PERIPHERALS

Leica RCD30 Oblique pod	Holds 5 RCD30 camera heads, user exchangeable, designed for installation with a Leica PAV100 gyro-stabilised mount
Pod 37	
Height / diameter / weight	533 mm / 407 mm / 17 kg
Pod 53	
Height / diameter / weight	693 mm / 407 mm / 18 kg
Pod lifter	Lifter for Pod 53, can be mounted on PAV100 to move POD 53 up and down in the aircraft to avoid vignetting
Operator display	OC60 12.1" screen with 1024 x 768 resolution, designed for installation with Interface Stand IS40
Pilot display	PD60 6.3" screen with 1024 x 768 resolution, designed for cockpit mounting

ENVIRONMENTAL

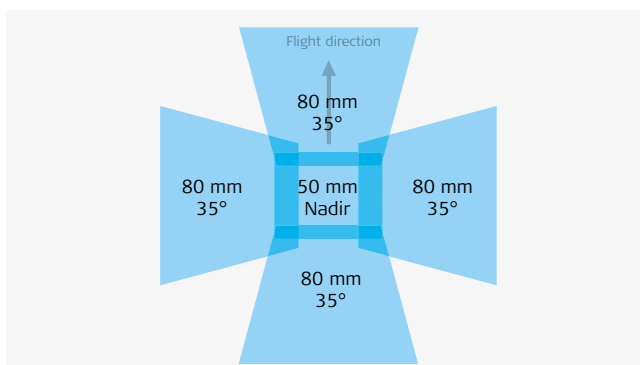
Pressure	Non-pressurised cabin up to ICAO 25,000 ft
Humidity	0 % to 95 % RH according ISO7137 (non-condensing)
Operating temperature	-20 °C to +45 °C
Storage temperature	-40 °C to +85 °C (except CH8x and lens)
Storage temperature	-40 °C to +70 °C (CH8x plus lens)

STANDARDS

RTCA DO-160G, EUROCAE-14G, USA FCC Part 15, EU Directive 1999/5/EC



Leica RCD30 cameras and penta pod installed in PAV100 with pod lifter



Leica RCD30 Oblique footprint, default configuration

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- when it has to be **right**

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