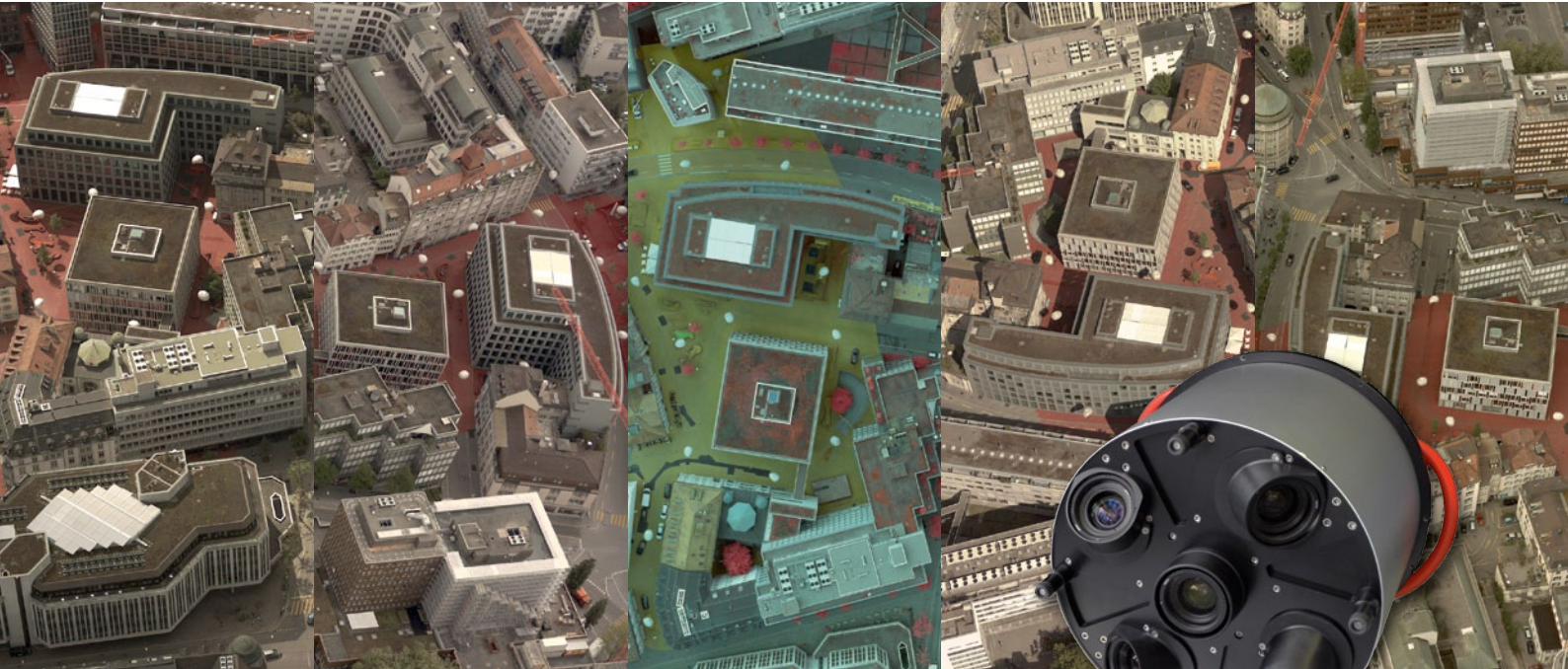


Leica RCD30 Oblique

Life from a Different Angle



Looking at Life from a Different Angle

The new Leica RCD30 Oblique camera system is specifically designed for high accuracy 3D urban mapping and 3D corridor mapping applications. Based on the leading Leica RCD30, the world's first 60MP multi-spectral medium format camera, the Leica RCD30 Oblique boasts a number of unique photogrammetric design features that not only offer superior image quality and highest accuracy, but also highest flexibility.

Photogrammetric Quality – A Measurable Difference for Urban Mapping

For 3D urban and corridor mapping applications, the Leica RCD30 Oblique has a number of distinct advantages:

- A choice of CH61 RGB only and CH62 multispectral RGBN camera heads
- Multi-directional motion compensation for highest image quality
- 60MP camera heads to acquire more information – upgradeable to 80MP from 2013
- Ruggedized design for photogrammetric applications and high geometric accuracy
- Compact, flexible and protected installation inside Leica PAV80 gyrostabilized mount
- Single camera controller CC32 with integrated GNSS/IMU system
- Fully integrated workflow from mission planning to post processing
- Flexible Trio and Penta head configuration for corridor mapping and urban mapping applications
- High frame rate
- Standardized aircraft installation compatible with other Leica sensors

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Leica RCD30 Oblique Specifications

Camera Head CH6x – Sensor Characteristics

CCD Size (60MP*)	8956 x 6708 pixels
Pixel Size (60MP)	6 µm
Dynamic Range of CCD	73 dB
Resolution A/D Converter	14-bit
Data Channel	16-bit lossless compressed
Maximum Frame Rate (Uno/Duo)	1.0 sec
Maximum Frame Rate (Trio)	1.5 sec
Maximum Frame Rate (Penta)	1.8 sec
Motion Compensation	Mechanical, bi-directional
Spectral Range	CH61RGB
Spectral Range	CH62RGB and NIR (780–880 nm), coregistered
Weight (w/o lens)	3.1 kg
Dimensions	Height 167 mm, diameter 128 mm

*sensor upgrades to 80MP available from Q2 2013

Camera Head CH6x – Optics

Lenses	
Leica NAG-D 50mm	Weight 0.8 kg, height 76 mm
Leica NAT-D 80mm	Weight 0.5 kg, height 46 mm
	High accuracy performance between -10°C and +30°C
	Central shutter, user replaceable (~200,000 + frames)
Shutter	
Aperture	Automatically controlled aperture
	2.8, 4.0, 5.6 and 8.0 for NAT-D 80 mm
	4.0, 5.6, 8.0, 11 for NAG-D 50 mm
Lens Mount	Precise bayonet connection, automated electrical connection
	Stabilized connection mechanics
IMU selection	Leica IPAS CUS4, DUS5m NUS5

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 CH6x
	Includes deeply coupled GNSS/IMU solution
	64-bit WIN7, 8 GB RAM, 32 GB flash, USB 2.0, SATA
	MM30 Solid state available in 320 GB, 600 GB and 1,200 GB
	CC32 holds up to 2 MM30s
Processor	
Mass Memory	Weight 0.5 kg
	Removable & portable

Mass Memory Capacity – For oblique configurations only a joint MM30 mode is available.

Joint MM30 1,200GB	39,600 RGB images or 31,600 RGBN images
Joint MM30 600GB	18,800 RGB images or 15,800 RGBN images
Joint MM30 320GB	10,600 RGB images or 8,400 RGBN images

Peripherals

Leica RCD30 Oblique Pod	Holds 3 or 5 RCD30 cameras, depending on base plate and configuration. Users exchangeable. Designed for installation with a Leica PAV80.
Height	485 mm
Diameter	390 mm
Weight incl IMU	17 kg
Operator and Pilot Display	
Operator Display	OC52 12.1" screen with 1024 x 768 resolution Designed for installation with Interface Stand IS40
Pilot Display	OC50 6.3" screen with 1024 x 768 resolution Designed for cockpit mounting
Guidance Indicator GI40	LED array display for cockpit mounting

Environmental

Pressure	Non-pressurized cabin up to ICAO 25,000 ft
Humidity	0% to 95% RH according ISO7137 (non-condensating)
Operating Temperature	-20°C to +45°C
Storage Temperature	-40°C to +85°C (except CH6x and lens)
Storage Temperature	-40°C to +70°C (CH6x plus lens)

Electrical

Average Power Consumption of Leica RCD30 Trio	365 W/28 VDC
Maximum Peak Power Consumption of Leica RCD30 Trio	~ 650 W/28 VDC < 0.3 s
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

Standards

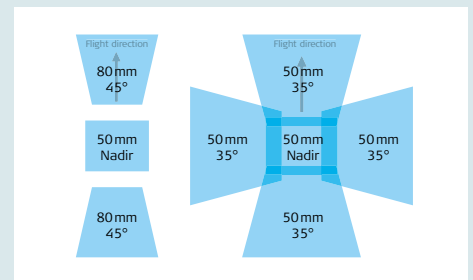
RTCA DO-160G, EUROCAE-14E, FAR§23.561, FAR§27.561, USA FCC Part 15, EU Directive 1999/5/EC



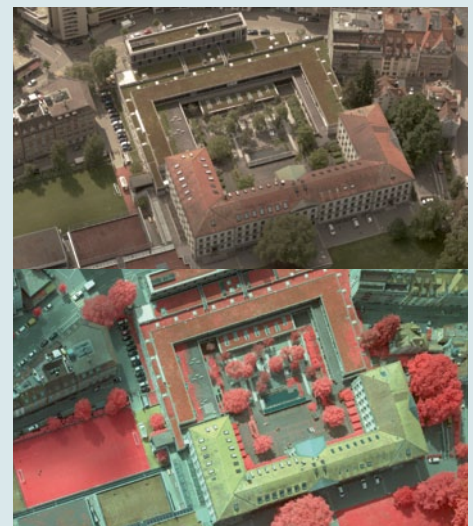
Leica RCD30 CH62 with Camera Controller CC32



Leica RCD30 Oblique Penta Pod with RCD30 cameras



Leica RCD30 Oblique Trio and Penta footprint



Leica RCD30 Oblique (RGB) and Nadir (RGBN) images

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Total Quality Management – our commitment to total customer satisfaction.

Ask your local Leica Geosystems dealer for more information about our TQM program.

Leica Geosystems AG
Heerbrugg, Switzerland

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