

Leica CS20 & CS35Data sheet





Dominant performance through seamless integration

The next generation of Leica Nova and Viva measuring instruments become the world's first self-learning total stations and MultiStation with Leica Captivate.

Transforming the Leica Viva GNSS experience, this engaging software joins ultimate GNSS receiver innovation with an industry-first 3D user immersion.

Leica Captivate modernises the Leica Nova scanning experience, for the first time merging the overlay of measured points, 3D models and point clouds into a single view.



Infinitely bridging the field to the office

While Leica Captivate captures and models data in the field, Leica Infinity processes the information back in the office. A smooth data transfer ensures the project stays on track. Leica Captivate and Leica Infinity work in conjunction to join previous survey data and edit projects faster and more efficiently.



Customer care is only a click away

Through Active Customer Care (ACC), a global network of experienced professionals is only a click away to expertly guide you through any problem. Eliminate delays with superior technical service, finish jobs faster with excellent consultancy support, and avoid costly site revisits with online service to send and receive data directly from the field. Control your costs with a tailored Customer Care Package, giving you peace of mind you're covered anywhere, anytime.





Leica CS20 & CS35





Leica CS35

SYSTEM SPECIFICATIONS

Processor TI OMAP4430 1GHz Dual-core ARM® (2,0 GHz, 3 MB Intel® Corte™, 4,9 MPCore™ (2,0 GHz, 3 MB Intel® Corte™, 4,0 MPCore™ (2,0 GHz, 3 MB Intel® Smart Cache) Memory (RAM) 1 GB 4 GB DDR3L SDRAM Internal storage (Max) 2 GB 128 GB SSD Screen resolution & type 800 x 480 WGA, Colour TFT 10.1" (257mm), Landscape Size (length x width x depth) 1095g 1100g Size (length x width x depth) 284mm x 150mm x 49mm 270mm x 188mm x 19mm Batteries 11.1V, 2.8Ah Li-lon 8 hours ENVIRONMENTAL SPECIFICATIONS brown 1P65 Shock resistance 1.2m (4 ft) / MIL-5TD-810F, Method 514.5 − Cat24 1.8m MIL-5TD-810G Operation temperature -30°C to +60°C 10°C to +50°C Storage temperature -40°C to 80°C 20°C to +60°C Military standard (MIL-STD) 810F X USB client ✓ X USB shots ✓ X USB shots ✓ X USB shots ✓ X USB shots ✓ X Serial RS232 ✓ X	3131EM 3FECH ICAHON3		
Context=AP OMP OFFOR™ 1,2 0 GHz, 3 MB Intel® Smart Cache) Memory (RAM) 1 GB	Operating system	Windows EC7	Windows 8.1 Pro
Internal storage (Max) 2 GB 128 GB 500 Screen size (Diagonal) & orientation (Primary) 5" (127mm), Landscape 10.1" (257mm), Landscape Screen resolution & type 800 x 480 WVAA, Colour TFT 1920 x 1200 WUXGA, Colour TFT Weight (including battery) 1095g 1100g Size (length x width x depth) 284mm x 150mm x 49mm 270mm x 188mm x 19mm Batteries 11.1V, 2.8Ah II-lon 10.8W, 4100mAh II-lon Battery life 8 hours 8 hours ENVIRONMENTAL SPECIFICATIONS Dust / Water resistance IP68 IP65 Shock resistance 1.2m (4 ft) / MIL-STD-810F, Method 514.5 − Cat24 1.8m MIL-STD-810G Operation temperature -30°C to +60°C -10°C to +50°C Storage temperature -40°C to 80°C -20°C to +60°C Storage temperature -40°C to 80°C -20°C to +60°C Storage temperature -40°C to 80°C -10°C to +50°C Storage temperature -40°C to 80°C -10°C to +60°C Storage temperature -40°C to 80°C -10°C to +50°C USB dost -4 -4	Processor		
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Screen resolution 6 typpe 800 x 480 WWGA, Colour TFT 1920 x 1200 WUXGA, Colour TFT Weight (including battery) 1095g 1100g Size (length x width x depth) 284mm x 150mm x 49mm 270mm x 188mm x 19mm Battereis 11.1V, 2.8Ah Li-lon 10.8V, 4100mAh Li-lon Battery life 8 hours 8 hours ENVIROMMENTAL SPECIFICATIONS Dust / Water resistance 1P68 1P65 Shock resistance 1.2m 4 ft / MIL-STD-810F, Method 514.5 – C424 1.8m MIL-STD-810G Operation temperature -30°C to +60°C -10°C to +50°C Storage temperature -40°C to 80°C -20°C to +60°C USB distance -40°C -40°C USB distance<	Internal storage (Max)	2 GB	128 GB SSD
Weight (including battery) 1095g 1100g Size (length x width x depth) 284mm x 150mm x 49mm 270mm x 188mm x 19mm Battery life 8 hours 8 hours ENVIRONMENTAL SPECIFICATIONS IP65 Dust / Water resistance 1.2m (4 ft) / MIL-STD-810F, Method 514.5 − Cat24 1.8m MIL-STD-810G Operation temperature -30°C to +60°C -10°C to +50°C Storage temperature -40°C to 80°C -20°C to +60°C Military standard (MIL-STD) 810F X USB dient ✓ X USB dient ✓ X USB host ✓ X Serial RS232 ✓ X Power jack ✓ X Audio jack X ✓ Integrated Bluetooth® ✓ X Power jack ✓ ✓ Audio jack X ✓ Integrated Bluetooth® ✓ ✓ VSER INTERFACE X ✓ Touch screen ✓ ✓ On screen keyboard	Screen size (Diagonal) & orientation (Primary)	5" (127mm), Landscape	10.1" (257mm), Landscape
Size (length x width x depth) 284mm x 150mm x 49mm 270mm x 188mm x 19mm Batteries 11.1V, 2.8Ah Li-lon 10.8V, 4100mAh Li-lon Battery Ife 8 hours 8 hours ENVIRONMENTAL SPECIFICATIONS Dust / Water resistance IP68 IP65 Shock resistance 1.2m (4 ft) / MIL-STD-810F, Method 514.5 − Cat. 24 1.8m MIL-STD-810G Operation temperature -30°C to +60°C -10°C to +50°C Storage temperature -40°C to 80°C -20°C to +60°C Willitary standard (MIL-STD) 810F 810G CONNECTIVITY X X USB client ✓ X USB client ✓ X USB storage ✓ X USB storage <td< td=""><td>Screen resolution & type</td><td>800 x 480 WVGA, Colour TFT</td><td>1920 x 1200 WUXGA, Colour TFT</td></td<>	Screen resolution & type	800 x 480 WVGA, Colour TFT	1920 x 1200 WUXGA, Colour TFT
Batteries 11.1V, 2.8Ah Li-lon 10.8V, 4100mAh Li-lon Battery life 8 hours ENVIRONMENTAL SPECIFICATIONS JP68 IP65 Dust / Water resistance 1 P68 IP65 Shock resistance 1.2m (4 ft) / MIL-STD-810F, Method 514.5 - Cat24 1.8m MIL-STD-810G Operation temperature -30°C to +60°C -10°C to +50°C Storage temperature -40°C to 80°C -20°C to +60°C Military standard (MIL-STD) 810F 810G CONNECTIVITY S X USB client ✓ X USB nost ✓ X USB Nost ✓ X Scrail RS232 ✓ X Power jack ✓ ✓ Audio jack X X Integrated Bluetooth* ✓ ✓ Integrated modem ✓ ✓ Robotic total station compatible ✓ ✓ USER INTERFACE Y ✓ Touch screen ✓ ✓ On screen keyboard X	Weight (including battery)	1095g	1100g
Battery life 8 hours 8 hours ENVIRONMENTAL SPECIFICATIONS Dust / Water resistance IP68 IP65 Shock resistance 1.2m (4 ft) / MIL-STD-810F, Method 514.5 - Cat24 1.8m MIL-STD-810G Operation temperature -30°C to +60°C -10°C to +50°C Storage temperature -40°C to 80°C -20°C to +60°C Military standard (MIL-STD) 810 G CONNECTIVITY SD/SDHC ✓ X USB client ✓ X USB client ✓ X USB host ✓ X Serial RS232 ✓ X Power jack ✓ X Audio jack X X Integrated Bluetooth® ✓ X Integrated WLAN ✓ Y Integrated WLAN ✓ X Robotic total station compatible ✓ X USER INTERFACE X Y Touch screen ✓ X On screen keyboard ✓	Size (length x width x depth)	284mm x 150mm x 49mm	270mm x 188mm x 19mm
ENVIRONMENTAL SPECIFICATIONS Dust / Water resistance IP68 IP65 Shock resistance 1.2m (4 ft) / MIL-STD-810F, Method 514.5 − CA244 1.8m MIL-STD-810G Operation temperature -30°C to +60°C -10°C to + 50°C Storage temperature -40°C to 80°C -20°C to + 60°C Military standard (MIL-STD) 810F 810G CONNECTIVITY SD/SDHC ✓ X USB client ✓ X USB nost ✓ 1 x USB 3.0 & 1 x USB 2.0 Serial RS232 ✓ ✓ Power jack ✓ ✓ Audio jack X ✓ Integrated Bluetooth* ✓ ✓ Integrated WLAN ✓ ✓ Integrated modem ✓ ✓ Robotic total station compatible ✓ ✓ USER INTERFACE ✓ ✓ Skeypad type QWERTY keypad Pop up keypad Number of keys Z Pomper jeve type Camera Smegapixel Fron	Batteries	11.1V, 2.8Ah Li-lon	10.8V, 4100mAh Li-Ion
Dust / Water resistance IP68 IP65 Shock resistance 1.2m (4 ft) / MIL-STD-810F, Method 514.5 − Cat24 1.8m MIL-STD-810G Operation temperature -30°C to +60°C -10°C to +50°C Storage temperature -40°C to 80°C -20°C to +60°C Military standard (MIL-STD) 810F 810G CONNECTIVITY SUSD CH ✓ X USB client ✓ X USB nost ✓ X USB host ✓ X Serial RS232 ✓ X Power jack ✓ X Audio jack X Y Integrated Bluetooth® ✓ ✓ Integrated WLAN ✓ ✓ Integrated modem ✓ ✓ Robotic total station compatible ✓ ✓ USER INTERFACE ✓ ✓ Skeypad type QWERTY keypad Pop up keypad Number of keys Z Pop up keypad Number of keys Z Rear: 5 megapixel front: HD-	Battery life	8 hours	8 hours
Shock resistance 1.2m (4 ft) / MIL-STD-810F, Method 514.5 − Cat24 1.8m MIL-STD-810G Operation temperature -30°C to +60°C -10°C to +50°C Storage temperature -40°C to 80°C -20°C to +60°C Military standard (MIL-STD) 810G CONNECTIVITY SD/SDHC ✓ X USB client ✓ X USB tost ✓ 1 x USB 3.0 & 1 x USB 2.0 Serial RS232 ✓ X Power jack ✓ ✓ Audio jack X V Integrated Bluetooth® ✓ V Integrated Bluetooth® ✓ V Integrated modem ✓ V Robotic total station compatible V V USSE INTERFACE V V Touch screen V V On screen keyboard V V Keypad type Querry keypad Pop up keypad Number of keys P Rear: 5 megapixel Flash V V	ENVIRONMENTAL SPECIFICATIONS		
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Storage temperature -40°C to 80°C -20°C to +60°C Military standard (MILSTD) 810F 810G CONNECTIVITY SD/SDHC ✓ X USB client ✓ X USB host ✓ 1 x USB 3.0 ₺ 1 x USB 2.0 Serial RS232 ✓ X Power jack ✓ ✓ Audio jack X ✓ Audio jack X ✓ Integrated Bluetooth® ✓ ✓ Integrated WLAN ✓ ✓ Integrated modem x ✓ Robotic total station compatible ✓ ✓ V ✓ ✓ USER INTERFACE ✓ ✓ Touch screen ✓ ✓ Keypad type Querry keypad Po pu keypad Number of keys 67 Po pu keypad Number of keys 67 Rear: 5 megapixel Final: Ho-Video with 720 pixel (images 1.3 megapixel) Front: Ho-Video with 720 pixel (images 1.3 megapixel) Flas	Shock resistance	1.2m (4 ft) / MIL-STD-810F, Method 514.5 – Cat24	1.8m MIL-STD-810G
Military standard (MILSTD) 810F 810G CONNECTIVITY V X SD/SDHC ✓ X USB client ✓ X USB host ✓ X Serial RS232 ✓ X Power jack ✓ ✓ Audio jack X ✓ Integrated Bluetooth® ✓ ✓ Integrated WLAN ✓ ✓ Integrated modem ✓ ✓ Robotic total station compatible ✓ ✓ USER INTERFACE ✓ ✓ Touch screen ✓ ✓ On screen keyboard ✓ ✓ Keypad type OWERTY keypad Pop up keypad Number of keys 67 7 INTEGRATED PERIPHERALS Rear: 5 megapixel Camera Front: HD-Video with 720 pixel (Images 1.3 megapixel) Flash ✓ ✓ Compass ✓ ✓ Accelerometer ✓ ✓ Gyro <td>Operation temperature</td> <td>-30°C to +60°C</td> <td>-10°C to + 50°C</td>	Operation temperature	-30°C to +60°C	-10°C to + 50°C
CONNECTIVITY SD/SDHC V USB client V USB host V I x USB 3.0 & 1 x USB 2.0 Serial RS232 V Power jack Audio jack Integrated Bluetooth® V Integrated MLAN Integrated MCAN Integrated modem V Robotic total station compatible V USER INTERFACE TOUCH Screen V On screen keyboard V Keypad type QWERTY keypad Number of keys 67 INTEGRATED PERIPHERALS Camera S megapixel Front: HD-Video with 720 pixel (Images 1.3 megapixel) Flash V Compass V K K Compass V K K Compass V K K Corro V K Corro V K Corro V K Corro V K K K K K K K K K K K K K K K K K K	Storage temperature	-40°C to 80°C	-20°C to + 60°C
SD/SDHC USB client USB client USB host V V V N Serial RS232 V Power jack Audio jack Integrated Bluetooth® V Integrated Bluetooth® V Integrated modem V Integrated wide V Integrated modem V Integrated wide V Integrated modem V Integrated wide V	Military standard (MILSTD)	810F	810G
USB client V X USB host V 1 x USB 3.0 & 1 x USB 2.0 Serial RS232 Power jack Audio jack Integrated Bluetooth® Integrated Bluetooth® V Integrated wuAN Integrated modem V Robotic total station compatible V USER INTERFACE Touch screen On screen keyboard V Keypad type QWERTY keypad Number of keys INTEGRATED PERIPHERALS Camera S megapixel Front: HD-Video with 720 pixel (Images 1.3 megapixel) Flash Compass Accelerometer V Corpo V X X Corpo V X X Corpo V X X X X X X X X X X X X	CONNECTIVITY		
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Serial RS232	USB client	✓	X
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Integrated Bluetooth®	Power jack	✓	✓
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Touch screen✓✓On screen keyboard✓✓Keypad typeQWERTY keypadPop up keypadNumber of keys677INTEGRATED PERIPHERALSCamera5 megapixelRear: 5 megapixel Front: HD-Video with 720 pixel (Images 1.3 megapixel)Flash✓✓Compass✓✓Accelerometer✓✓Gyro✓✓DISTO™✓✓	Robotic total station compatible	V	V
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Number of keys677INTEGRATED PERIPHERALSCamera5 megapixelRear: 5 megapixel Front: HD-Video with 720 pixel (Images 1.3 megapixel)Flash✓✓Compass✓XAccelerometer✓✓Gyro✓✓DISTO™✓X	On screen keyboard	✓	V
INTEGRATED PERIPHERALS Camera 5 megapixel Front: HD-Video with 720 pixel (Images 1.3 megapixel) Flash Compass Accelerometer Gyro DISTO™ Kear: 5 megapixel Front: HD-Video with 720 pixel (Images 1.3 megapixel) X X X X X X X X X X X X X	Keypad type	QWERTY keypad	Pop up keypad
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Front: HD-Video with 720 pixel (Images 1.3 megapixel) Flash Compass Accelerometer Gyro DISTO™ Front: HD-Video with 720 pixel (Images 1.3 megapixel) ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	INTEGRATED PERIPHERALS		
Flash Compass Accelerometer Gyro DISTOTM Compass	Camera	5 megapixel	Front: HD-Video with 720 pixel
Accelerometer Gyro DISTOTM X X X	Flash	V	
Gyro ✓ X DISTO™ ✓ X	Compass	V	X
Gyro ✓ DISTO™ ✓ X X	Accelerometer	✓	/
	Gyro	✓	X
Expansion pack 🗸	DISTO™	✓	X
	Expansion pack	✓	X

✓ Standard

✓ Not Available

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