Leica CS20 & CS35

Data 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.

ACC»

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 1CHz Dual-core ARM®0 Intel® Core™ 1-3 AIB Intel® Smart Cache (Note ™-A9 MPCore™ 1 (AB DR21, SDRAM Intel® Smart Cache) Memory (RAM) 1 GB 4 G BDR31, SDRAM Internal storage (Max) 2 GB 128 GB SSD Screen size (Diagonal) & orientation (Primary) 5" (127mm), Landscape 10.20 x 1200 WUXGA, Colour TF Screen resolution & type 80 x 480 WWGA, Colour TFF 11.00g 1200 x 1200 WUXGA, Colour TFF Weight (including battery) 1095g 1100g 270mm x 188mm x 19mm Size (length x width x depth) 28 Amm x 150mm x 49mm 270mm x 188mm x 19mm Batteries 8 hours 8 hours Battery life 8 hours 8 hours Battery life 8 hours 10.8 W, 4100mAh Li-lon Battery life 180 180	3131EW 3FECH ICAHON3		
Context	Operating system	Windows EC7	Windows 8.1 Pro
Internal storage Max 2 GB	Processor		
Screen size (Diagonal) & orientation (Primary) 5" (127mm), Landscape 10.1" (257mm), Landscape Screen resolution & type 800 x 480 WVGA, Colour TFT 1920 x 1200 WUXGA, Colour TFT Weight (Including battery) 1095 1100g Size (Iength 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 Ire 8 hours 8 hours ENVIRONMENTAL SPECIFICATIONS Dust / Water resistance IP68 IP65 Shock resistance 1.2m (4 tt) / 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 <	Memory (RAM)	1 GB	4 GB DDR3L SDRAM
Screen resolution 6 type 800 x 480 WVGA, 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 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 – C242 1.8m MIL-STD-810G Operation temperature -30°C to +60°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 20°C to +60°C Storage temperature -40°C to 80°C X Storage temperature -40°C to 80°C X USB departmental (MIL-STD) 810G USB departmental (MIL-STD) X USB departmental (MIL-STD) X USB departmental (MIL-STD) X USB departmental (MIL-STD) X USB departmental (MIL-STD) X <t< td=""><td>Internal storage (Max)</td><td>2 GB</td><td>128 GB SSD</td></t<>	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 Battery life 8 hours 8 hours ENVIRONMENTAL SPECIFICATIONS Dust / Water resistance 1.2m (4 ft) / MIL-STD-810F, Method 514.5 − Cat24 1.8m MIL-STD-810G Oberation 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 F X SUSDING ✓ X USB client ✓ X USB dient ✓<	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 10.8W, 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 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 V	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 IP68 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 Object ✓ X USB client ✓ X USB Nost ✓ X Scraid RS232 ✓ X Power Jack ✓ X Audio Jack X X Integrated Bluetooth* ✓ ✓ Integrated modem ✓ ✓ Robotic total station compatible ✓ ✓ USER INTERFACE X ✓ Touch screen ✓ ✓ On screen keyboard X X Keypad type WeRTY keypad Pop up keypad Number of keys	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 (lent <	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 / Milt-STD-810F, Method 514.5 − CA24 1.8m Milt-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 (MILSTD) 810F 810G CONNECTIVITY SD/SDHC ✓ X USB client ✓ X USB nost ✓ 1 x USB 3.0 & 1 x USB 2.0 Serial RS232 ✓ X Power jack ✓ ✓ Audio jack X ✓ Integrated Bluetooth* ✓ ✓ Integrated WLAN ✓ ✓ Integrated WLAN ✓ ✓ USER INTERFACE ✓ ✓ USER INTERFACE ✓ ✓ Keypad type QWERTY keypad Pop up keypad Number of keys 7 Rear: 5 megapixel Front: HD-Video with 720 pixel (Images 1.3 megapixel) Camera	Batteries	11.1V, 2.8Ah Li-lon	10.8V, 4100mAh Li-lon
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 (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 ✓ X Audio jack X ✓ Integrated Bluetooth* ✓ ✓ Integrated Bluetooth* ✓ ✓ Integrated modem ✓ ✓ Robotic total station compatible ✓ ✓ USER INTERFACE ✓ ✓ VEX. Y ✓ Keypad type QWERTY keypad Pop up keypad Number of keys A Rear: 5 megapixel Finalt ✓ Fron	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 client ✓ X USB host ✓ X Serial RS232 ✓ X Power jack ✓ ✓ Audio jack X ✓ Integrated Bluetooth® ✓ ✓ Integrated Bluetooth® ✓ ✓ Integrated modem ✓ ✓ Robotic total station compatible ✓ ✓ USSE INTERFACE ✓ ✓ Touch screen ✓ ✓ On screen keyboard ✓ ✓ Keypad type QWERTY keypad Pop up keypad Number of keys Forespanixel Rear: 5 megapixel Fla	ENVIRONMENTAL SPECIFICATIONS		
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Storage temperature -40°C to 80°C -20°C to +60°C Military standard (MILSTD) 810F 810G CONNECTIVITY V 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 ✓ ✓ V ✓ ✓ Non screen keyboard ✓ ✓ Keypad type Q V Number of keys 67 P Number of keys 67 P INTEGRATED PERIPHERALS Rear: 5 megapixel Flash ✓ ✓ Compass ✓ ✓ Accelerometer ✓ ✓ Gyro ✓ ✓ DISTO™ ✓	Shock resistance	1.2m (4 ft) / MIL-STD-810F, Method 514.5 – Cat24	1.8m MIL-STD-810G
Military standard (MILSTD) 810F 810G CONNECTIVITY X SD/SDHC ✓ X USB client ✓ X USB host ✓ X Serial RS232 ✓ X Power jack ✓ ✓ Audio jack X ✓ Integrated Bluetooth® ✓ ✓ Integrated Bluetooth® ✓ ✓ Integrated modem ✓ ✓ Robotic total station compatible ✓ ✓ USER INTERFACE ✓ ✓ Touch screen ✓ ✓ You screen keyboard ✓ ✓ Vespad type QWERTY 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 <t< td=""><td>Operation temperature</td><td>-30°C to +60°C</td><td>-10°C to + 50°C</td></t<>	Operation temperature	-30°C to +60°C	-10°C to + 50°C
Military standard (MIL-STD) 810F 810G CONNECTIVITY V X USB Client ✓ X USB Host ✓ 1 x USB 3.0 % 1 x USB 2.0 Serial RS232 ✓ X Power jack ✓ ✓ Audio jack X ✓ Integrated Bluetooth® ✓ ✓ Integrated MUAN ✓ ✓ Integrated modem ✓ ✓ Robotic total station compatible ✓ ✓ On screen keyboard ✓ ✓ On screen keyboard ✓ ✓ Number of keys 67 7 Number of keys 67 7 INTEGRATED PERIPHERALS Rear: 5 megapixel Camera 5 megapixel Rear: 5 megapixel Front: HD-Video with 720 pixel (Images 1.3 megapixel) (Images 1.3 megapixel) Flash ✓ ✓ Compass ✓ ✓ Accelerometer ✓ ✓ Gyro ✓ ✓	Storage temperature	-40°C to 80°C	-20°C to + 60°C
SD/SDHC USB client USB client USB host V V V Serial RS232 V Power jack Audio jack V Integrated Bluetooth® V Integrated MUAN V Integrated modem V Integrated widh V Integrated modem V I	Military standard (MILSTD)	810F	810G
SD/SDHC USB client USB client USB host V V V Serial RS232 V Power jack Audio jack V Integrated Bluetooth® V Integrated MUAN V Integrated modem V Integrated widh V Integrated modem V I	CONNECTIVITY		
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USER INTERFACE Touch screen ✓ On screen keyboard Keypad type QWERTY keypad Number of keys 67 INTEGRATED PERIPHERALS Camera 5 megapixel Flash ✓ Compass ✓ Accelerometer Gyro DISTO™ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	Integrated modem	✓	✓
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INTEGRATED PERIPHERALS Camera 5 megapixel Front: HD-Video with 720 pixel (Images 1.3 megapixel) Flash Compass Accelerometer Gyro DISTO™ X Rear: 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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Camera5 megapixelRear: 5 megapixel Front: HD-Video with 720 pixel (Images 1.3 megapixel)Flash✓✓Compass✓XAccelerometer✓✓Gyro✓XDISTO™✓X	INTEGRATED PERIPHERALS		
Flash ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓		5 megapixel	Front: HD-Video with 720 pixel
Accelerometer Gyro DISTOTM X X X	Flash	V	
Gyro ✓ METALE TO THE CONTROLL OF THE CONTR	Compass	V	X
Gyro DISTO™ ✓ X X	Accelerometer	✓	V
DISTO™	Gyro	V	X
Expansion pack × X	DISTO TM	✓	X
	Expansion pack	✓	X

✓ Standard

✓ Not Available

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