Beijing Dorland
System Control
Technology Co., Ltd.

Room1107, Tower B, Tsinghua
Tongfang Technology Square,
No.1 Wangzhuang Road,
Haidian District, Beijing, P.R.China

Tel: +86-10-62198496
Fax: +86 010 62985217

www.dorland-tech.cn
tian@dorland.com.cn

DORLAND Industrial Intrinsically Safe Notebook Ex NB09S

Developed by Beijing Dorland System Control Technology Co., LTD., the industrial intrinsically safe & solid Notebook Ex NB09S adopted advanced technology with intrinsically safe circuit, 14" screen（touch screen is optional） and 2.0 Megapixel (Front Camera). Its waterproof and dustproof performance can meet the IP65 standards; In addition, the Notebook supports fingerprint identification, WIFI and Bluetooth, built-in GPS, altimeter, compass and other functions suitable for outdoor construction and pipeline inspection. It can also cooperate with OA office system, checking positioning system and data acquisition system etc. Especially it is used in dangerous environment of the explosion, such as petroleum, chemical, pharmaceutical, oil depot, tank farm as well as the dangerous sites with combustible and explosive gas. It is convenient for users to dispatch communicate timely.

Protection Grade：IP65
Explosive-proof Grade：Ex ic IIB T5 Gc
Certification No.: CCRI 20.2233X

OS：Windows 10 IOT 64bit, Optional Windows 11 Pro/Home
CPU：11th Generation　Intel Tiger Lake UP3 -28W i5-1135G7 / i7-1165G7
Screen：14 inch Full-rugged Notebook,
1920(H)×1080(V)，700cd/㎡
RAM：8GB/16GB　　**SSD：**256GB/512GB/1TB

Cameras：2.0MP front
WIFI：support wi-fi 6 802.11a,b,d,e,g,h,i,k,n,r,u,v,w,ac,ax
Bluetooth：BT5.1 (BLE) class1　Transmission distance: 10 m
GPS：U-blox NEO-7,Support:GLONASS,QZSS,GPS(USB interface）
Optional Beidou

Dimension：363.2 x 287.4 x 42.1mm (Bare)
Weigh：2.85kg(Bare)
Battery：Capacitive 2500mAh / 7.4V
External Lithium-ion ploymer battery 7500mAh / 7.4V
Battery life: 7 hours (default: 50% volume, default: 200 lumens, 720P HD video)
Dimension: 363.2 x 287.4 x 42.1 mm (Host)
Weight: 2.85kg
Fingerprint：×1 SPI fingerprint

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Product Certificate			
Type	**Details**	**Decription**	**Optional**
Certificate System	**Ex-mark**	Ex ic IIB T5 Gc	NA
	Certification No.	CCRI 20.2233X	NA
	IP65	IP65	NA
Product Outlook			
Type	**Details**	**Standard Configuration**	**Optional**
Product Form	**Type**	14 inch Full-rugged Notebook	NA
	Dimension	363.2 x 287.4 x 42.1 mm (Host)	NA
	Weight	2.85kg	NA
	Device Color	Black	NA
LCD	**Screen size**	14" 16:9	NA
	Resolution	1920(H)×1080(V) FHD	NA
	Brightness	700cd/㎡	NA
TP	**Touch panel**	NA	10 point touch capacitive，G+G，Rigidity: 7H up, Anti-scratch, TP thickness：1.1mm, COF
Camera	**Front**	Front 2.0MP	NA
Speaker	**Built-in**	Built-in 8Ω/1W x2	NA
Mic	**Built-in**	×2 Internal Digit MIC	NA
Battery（Built-in）	**Type**	Built-in Lithium-ion ploymer battery	NA
	Capacitive	2500mAh / 7.4V	NA
	Endurance	0.5hrs(Default 50% volume，default 200 nit，Play 720P HD video)	NA
Battery (Pluggable)	**Type**	External Lithium-ion ploymer battery	NA
	Capacitive	7500mAh / 7.4V	NA
	Endurance	6.5 hrs(Default 50% volume，default 200 nit，Play 720P HD video)	NA
System Hardware Configuration			
Type	**Details**	**Decription**	**Optional**
CPU	**Type**	11th Generation Intel Tiger Lake UP3 -28W i5-1135G7	i7-1165G7
	Speed	Processor 4core 8 threads, processor base frequency 2.40 GHz, maximum frequency 4.2 GHz	base frequency 2.80 GHz, maximum frequency 4.70 GHz
GPU	**Type**	Intel® UHD Graphics 620	NA

RAM	**DDR4L**	8GB	16GB
SSD	**NGFF SSD**	256GB	512GB/1TB
HDD	**Type**	NA	support HDD
TPM	**Built-in**	Built-in TPM2.0 SLB9670VQ2.0	NA
Hall switch	**hall**	hall	NA
Network Connections			
Type	**Details**	**Decription**	**Optional**
WIFI	**WIFI Modle**	support wi-fi 6 802.11a,b,d,e,g,h,i,k,n,r,u,v,w,ac,ax	NA
Bluetooth	**Built-in**	BT5.1 (BLE) class1 Transmission distance：10m	NA
2G/3G/4G	**Built-in**	NA	（European version）M.2 LTE-FDD: B1/3/5/7/8/20 LTE-TDD: B40 WCDMA: B1/5/8 GSM: 900/1800
5G	**Built-in**	NA	（All over the world, excluding China）M.2 5G NR：n1/n2/n3/n5/n7/n8/n12/n20/ n25/n28/n38/n40/n41/n48*/ n66/n71/n77/n78/n79 LTE-FDD：B1/B2/B3/B4/B5/B7/B8/ B12(B17)/B13/B14/B18/B19/ B20/B25/B26/B28/B29/B30/ B32/B66/B71 LTE-TDD： B34/B38/B39/B40/B41/B42/ B43/B48 LAA：B46（Only support 2 x 2 MIMO） WCDMA： B1/B2/B3/B4/B5/B6/B8/B19 GNSS：GPS/GLONASS/ BeiDou(Compass)/Galileo
NFC	**Built-in Optional**	NA	NXP300
GPS	**Built-in**	U-blox NEO-7 supports satellites :GPS; Capture sensitivity :-160 dBm; Cold start time: <50 seconds, hot start time: <28 seconds, frequency: 0.25Hz... 10 MHz (configurable)	Optional Beidou+GPS U-blox NE0-M8N-0
Data Collection			

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Type	Details	Decription	Optional
Fingerprint	**Built-in**	×1 SPI fingerprint(Power on login)	NA
Interface			
Type	**Details**	**Decription**	**Optional**
USB3.0	**USB3.0**	USB3.0*3	NA
USB2.0	**USB2.0**	USB2.0*1	NA
Earphone Jack	**Earphone Jack**	∮3.5mm Standard earphone jack x1 host	NA
HDMI	**HDMI**	HDMI x1 （type-A）	NA
SD Card	**SD Card**	SD Card x1, max support 128GB	NA
SIM Card	**SIM Card**	SIM Card x1	NA
DC	**DC Jack**	DC 19V 3.42A power jack x1	NA
Serial port	**Serial port**	DB9 (RS232) ×1	NA
RJ45 port	**Internet port**	x2 （10/100/1000M Self-adaption）	NA
Burglar lock hole(Right)	**Kensington**	Kensington x1	NA
Heat dissipation air outlet(Right)	**Heat dissipation air outlet(Right)**	Heat dissipation air outlet(Right) x1	NA
Left extension dock	**Left extension dock**	NA	×1 Passenger transfer card PCIE 4X solt or HDD
POGO PIN	**POGO PIN**	POGO 5PIN*1	NA
Button			
Type	**Details**	**Decription**	**Optional**
power	**Power Button**	x1	NA
Reset	**Reset Button**	Reset x 1	NA
P1	**P1**	Used to lock or open screen ×1	NA
Indicator light			
Type	**Details**	**Decription**	**Optional**
power	**Built-in**	×1 Light color is blue when boot(Blue will not too bright), Light off when machine closed.	NA
baterry	**Built-in**	×1(red and green double - color) Light color is red when charging, then become green when full charge , red light flash when low - power, it is not bright when discharge.	NA
HDD LED	**Built-in**	×1	NA

Caps lock	**Built-in**	×1, If the red light is on, it is uppercase. If the red light is off, it is lowercase	NA
3G/4G	**Built-in**	Light color is blue when 3G/4G opened ; Light off when 3G/4G closed	NA
Standard Accessories			
Type	**Details**	**Decription**	**Optional**
Power Adaptor	**Standard**	100~240V Input 19V3.42A/65W output USA standard CE approval	USA standard
			EU standard
Software Configuration			
Type	**Details**	**Decription**	**Optional**
OS	**OS version**	Windows 10 IOT	Windows11 Pro
			Windows 11 Home
Reliability			
Type	**Details**	**Decription**	**Optional**
Product Reliability	**Drop Height**	100cm composite wood floors, in operation status	
	Operate Temperature	'-20 °C to 60 °C	
	Store Temperature	'-30 °C to 70 °C	
	Humidity	Humidity: 95% Non-Condensing	

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CMA 170021131268

CNAS 中国认可 检测 TESTING CNAS L0738

CCRITC

CONFORMITY CERTIFICATE OF EXPLOSION-PROOF

Certificate No.: CCRI 20.2233X

Company:	Beijing Dorland System Control Tech Co.,Ltd.
Address:	Room 807, Yingu Plaza, North 4th Ring West Road, Haidian District, Beijing 100080,P.R. China.
Name of Product:	Industrial Intrinsically Safe & Solid Notebook
Type of Product:	Ex NB09S
Marking:	Ex ic ⅡB T5 Gc
Technical Documents:	Q/DLM 005-2020
Drawing No.:	Ex NB09S BZ01
Note(s):	1. Power supply by two separated rechargeable lithium-ion batteries with protective circuits. Rated voltage:7.4VDC/7000mAh, 7.4VDC/2500mAh; 2.The suffix "X" of the certificate means that it is forbidden to use external power supply and all kinds of external interfaces when using in hazardous places. It should be use at steady placement when working.

By verifying the drawings and technical documents and checking samples,the product complies with the following standards currently valid in P.R.China:

GB 3836.1-2010，GB 3836.4-2010

Date of Issue: 6.18.2020

Valid till: 6.17.2025

Authorize:

China Coal Research Institute Testing Center

（The test center of the national safety production of mining equipment and mining oil in Beijing）

Note：This certificate is only valid for the products that are in accord with samples tested and verified.
Center Add：No.5 Qingniangou Road,Hepingli,Beijing,100013 Tel/fax：010-89268018
The query url of Explosion-proof Certificate：http://www.ccritc.com.cn/Home