

APEXA CORE

Product Guide



Mar 2023

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APEXA CORE, the successor of APEXA

proven by APEXA and filled with powerful performance



APEXA G



APEXA TL
APEXA EL



APEXA CORE

Worldwide best-seller
POS model launched in 2016

Entering the global market
in the hospitality & retail industry

Rated as the most popular product
through continuous maintenance

Pioneering the POS industry equipped
with Intel's latest CPU in 2022

Products with improved performance
and speed

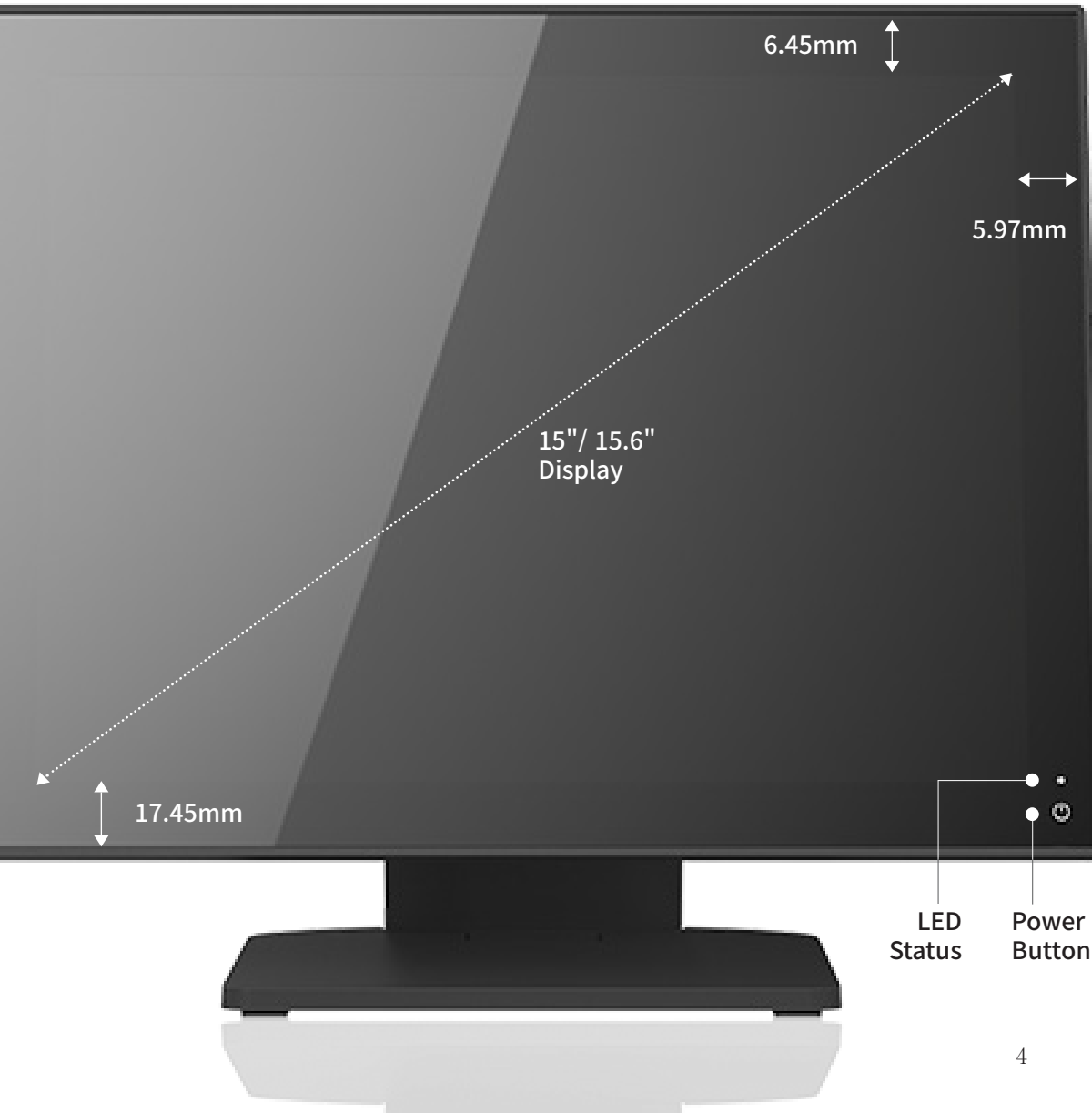
Expanded to various product lineups
from 15", 15.6", 19.5" and 21.5"

Released as an upgraded
next generation model by 2023

Extended interfaces available with
enhanced 7H touch glass, 24V/12V
Powered USB and External I/O Box option

Growing into the most popular model
at the NRF 2023 and EuroShop 2023
exhibitions

APEXA CORE Frontal View



Stylish as well as Strong

7H Industrial-grade touch glass, 300cd/m² display



Ultra thin bezel

Compared to APEXA, the bezels on the four sides of the monitor are slimmer, reducing the stuffiness of the screen.



7H industrial grade touch glass

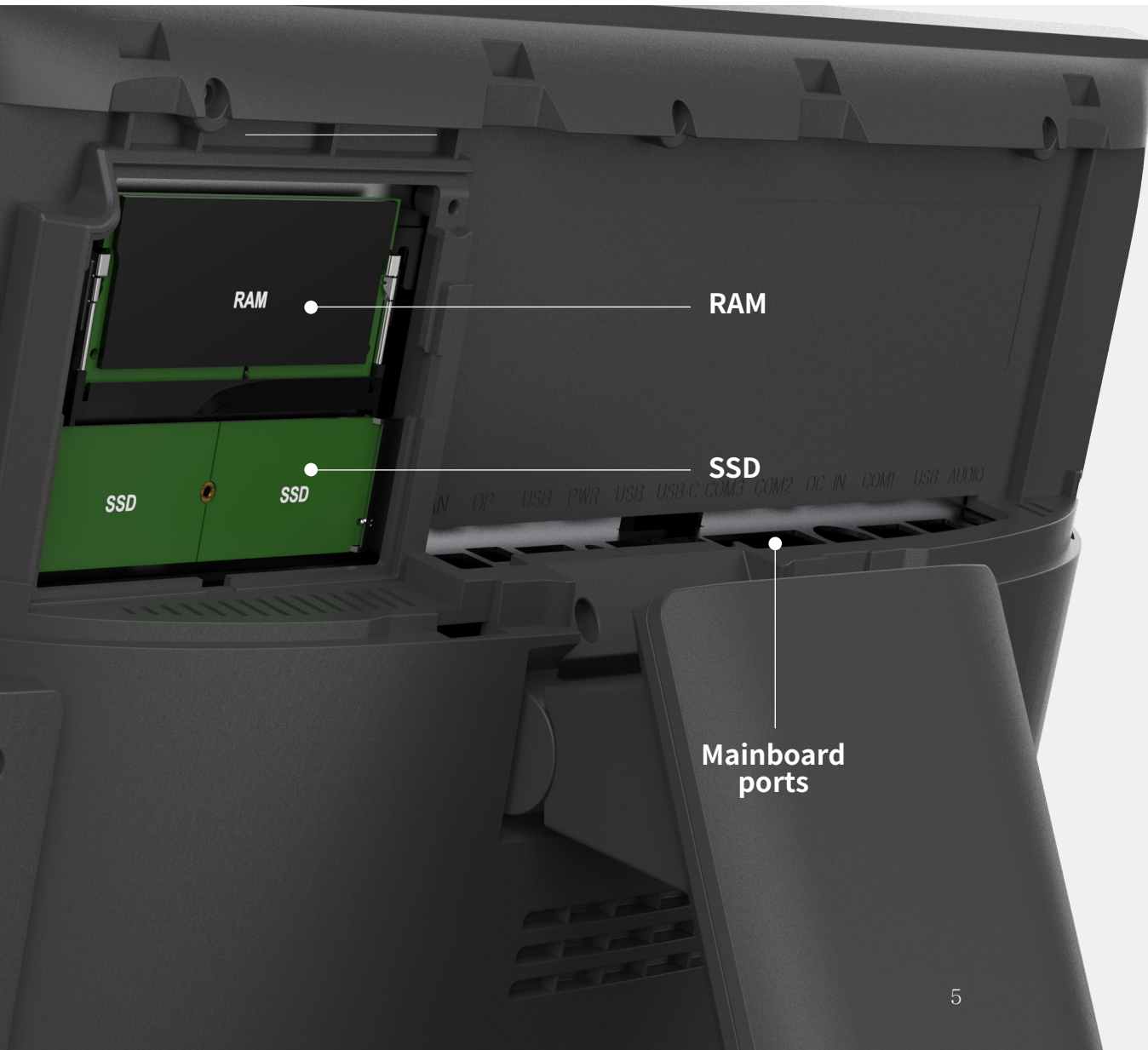
APEXA CORE has improved touch response through the yellow hollow pattern process, with higher resolution and visibility, and higher touch precision and reliability



300 cd/m² brightness

Thanks to the brightness of 300 cd/m², the resolution was improved and the visibility of the ITO yellow pattern process was increased.

APEXA CORE Rear View



Memory and Storage replacement **Fast and Easy Maintenance**

RAM and SSD can be replaced directly by opening the rear interface cover of the product. It is convenient to upgrade the POS system, and easy maintenance is also possible.

* 4GB Standard, DDR4 3200 MT/s, 1 x Socket x SODIMM (Max. 32GB)

* NVMe M.2 2242-D2-M (No capacity limit.) / Up to 2 units



Fast
Upgrade



Easy
Maintenance

APEXA CORE Design

APEXA CORE Port

POSBANK®

External I/O Box

External I/O Box can be connected using 12V/24V Powered USB. The interface can be expanded with 3 ports on the front and 6 ports on the back.

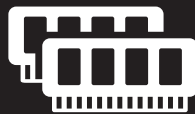
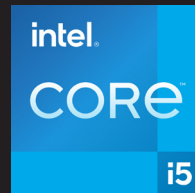
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- | | | | |
|-------------|--------|-----------|-------------|
| ① Audio Out | ② USB | ③ LAN | ④ DC IN |
| ⑤ COM3 | ⑥ COM2 | ⑦ USB-C | ⑧ USB |
| ⑨ POWER SW | ⑩ USB | ⑪ MINI DP | ⑫ COM1 Port |



Intel's latest CPUs, the 11th generation

Core i5-1117G, i3-1115G4, Celeron J6412 and N6210



Less power consumption and heat Maximized Performance

4GB Standard, DDR4 3200 MT/s,
1 x Socket x SODIMM (Max. 32GB)

Powerful DDR4 Memory

DDR4 3200 MT/s



DDR3L 1600 MT/s



Very small size Overwhelming speed

Form Factor : NVMe M.2 2242-D2-M
(No capacity limit.)

Mountable quantity: Up to 2 units can be installed.

* Factory Default : NVMe M.2 2242 128GB

5.3x faster NVMe™ SSD

NVMe M.2



SATA 3 (6Gb/s)



1. 7H Industrial-grade touch glass

APEXA CORE has improved touch response through the yellow hollow pattern process, with higher resolution and visibility.

Scratch Resistant

Reinforcement of stability
by external impact



High definition

Transparency and brightness



Reinforcement

Higher Precision and Reliability



2. Memory and Storage replacement

RAM and SSD can be easily replaced.

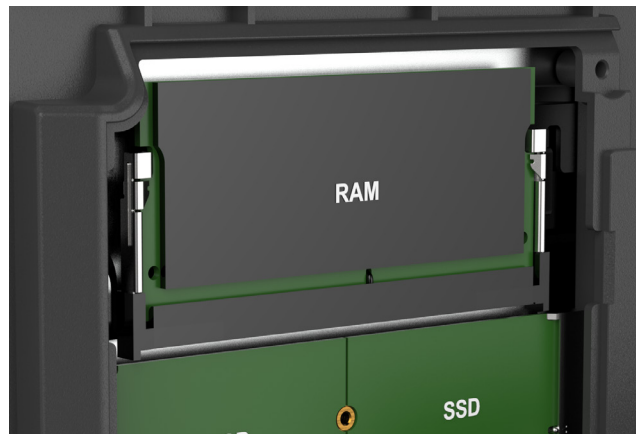
Just remove the rear interface cover and replace them for upgrading the system and maintenance.

Interface cover Removing



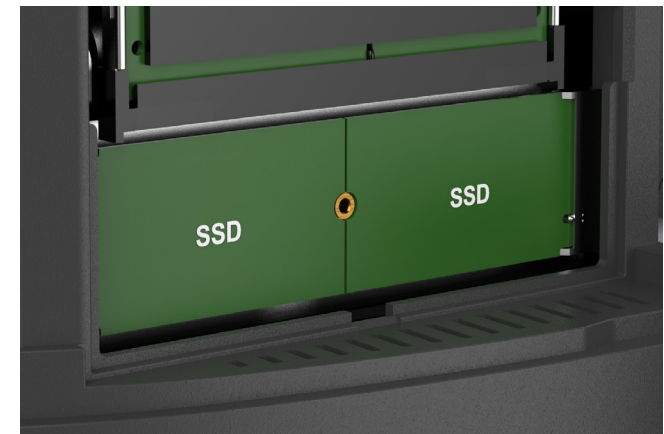
Open the rear interface cover.

RAM Replacement



4GB Standard DDR4 3200 MT/s
1 x Socket x SODIMM (Max. 32GB)

SSD Replacement

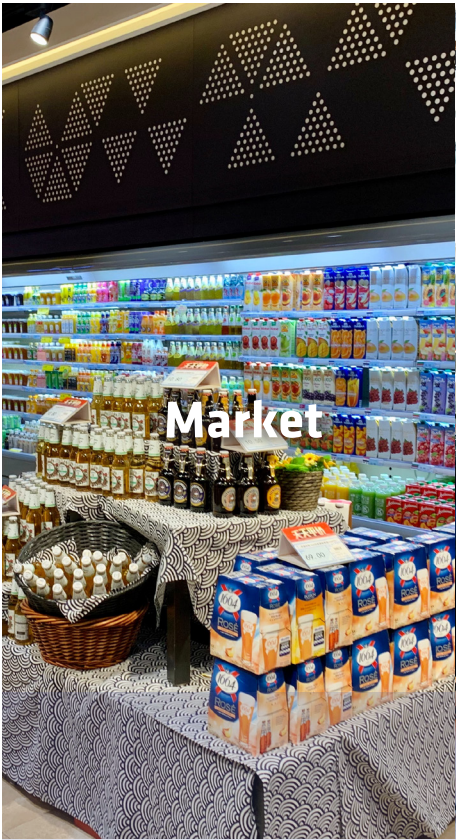


NVMe M.2 2242 x 2

3. Eco-packaging

APEXA CORE is packed with eco-friendly bio-vinyl and paper pulp packaging strong enough to withstand drop test requirements. Also, POSBANK has taken the leadership in reducing the size of the carton box which has helped reduce overall logistics costs.



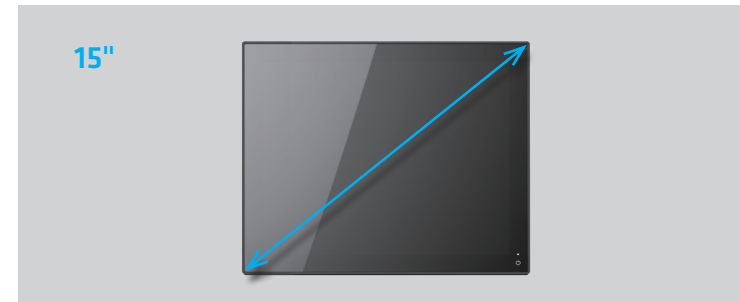
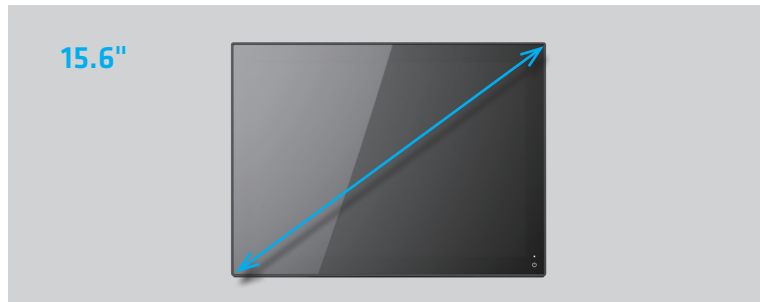


Experience APEXA CORE filled with ideal performance for retail & hospitality.

APEXA CORE Specification

APEXA CORE		
System		
	APEXA CORE TL	APEXA CORE EL
Processors	Intel® Core™ i5-1135G7 Processor 8M Cache, up to 4.20 GHz Intel® Core™ i3-1115G4 Processor 6M Cache, up to 4.10 GHz	Intel® Celeron® Processor J6412 1.5M Cache, up to 2.60 GHz
Chipset	Intel® Tiger Lake	Intel® Elkhart Lak
Memory	4GB Standard, DDR4 3200 MT/s, 1 x Socket x SODIMM (Max. 32GB)	
Storage	1. Form Factor NVMe M.2 2242-D2-M (No capacity limit.) 2. Mountable quantity: Up to 2 units can be installed. * Factory Default : NVMe M.2 2242 128GB	
RAID	RAID 0,1	-
Operating Systems	Windows 10 IoT Enterprise LTSC	
Audio	HD Audio Codec	

Display



	APEXA CORE TL-1560	APEXA CORE EL-1560
Type	15.6" FHD TFT LCD, LED Backlight	
Resolution	1920 x 1080	
Brightness	300 cd/m ² (typ.)	
Touchscreen	Projected Capacitive Touch	
	APEXA CORE TL-1500	APEXA CORE EL-1500
Type	15" TFT LCD, LED Backlight, Interface	
Resolution	1024 x 768	
Brightness	300 cd/m ² (typ.)	
Touchscreen	Projected Capacitive Touch	

APEXA CORE Specification

APEXA CORE																			
Interface																			
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%; background-color: #D3D3D3;">APEXA CORE TL- 1560 (24V)</th> <th style="width: 50%; background-color: #D3D3D3;">APEXA CORE EL- 1560 (24V)</th> </tr> </thead> <tbody> <tr> <td>Display</td> <td style="text-align: center;">2 x Displayport(MiniDP/USB-C Altmode)</td> </tr> <tr> <td>USB</td> <td style="text-align: center;">Front 6, Rear 4 6 (4 x USB 2.0, 1 x 24V Powered USB, 1 x 12V Powered USB) 4 (2 x USB 3.0, 1 x USB 2.0, 1 x USB-C)</td> </tr> <tr> <td>Serial</td> <td style="text-align: center;">5 (COM1 RJ45 , with 5V / 12V Power Output on 6 Pins, BIOS) (COM2~3 RJ-45 , Full Signal) (COM4 MiniDP, Only TX / RX, 12V Power Output, Reserved for CDP) (COM6 PinHeader, Only TX / RX, 5V Power Output, Reserved for MSR)</td> </tr> <tr> <td>Cash Drawer Port</td> <td style="text-align: center;">-</td> </tr> <tr> <td>LAN</td> <td style="text-align: center;">1 x Gigabit Ethernet (RJ-45)</td> </tr> <tr> <td>Audio</td> <td style="text-align: center;">1 x Line-out</td> </tr> <tr> <td>Power DC-IN</td> <td style="text-align: center;">3 Pin DIN Jack</td> </tr> <tr> <td>Extension Slot</td> <td style="text-align: center;">2 x M.2 for WiFi / BT, SSD</td> </tr> </tbody> </table>	APEXA CORE TL- 1560 (24V)	APEXA CORE EL- 1560 (24V)	Display	2 x Displayport(MiniDP/USB-C Altmode)	USB	Front 6, Rear 4 6 (4 x USB 2.0, 1 x 24V Powered USB, 1 x 12V Powered USB) 4 (2 x USB 3.0, 1 x USB 2.0, 1 x USB-C)	Serial	5 (COM1 RJ45 , with 5V / 12V Power Output on 6 Pins, BIOS) (COM2~3 RJ-45 , Full Signal) (COM4 MiniDP, Only TX / RX, 12V Power Output, Reserved for CDP) (COM6 PinHeader, Only TX / RX, 5V Power Output, Reserved for MSR)	Cash Drawer Port	-	LAN	1 x Gigabit Ethernet (RJ-45)	Audio	1 x Line-out	Power DC-IN	3 Pin DIN Jack	Extension Slot	2 x M.2 for WiFi / BT, SSD
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APEXA CORE Specification

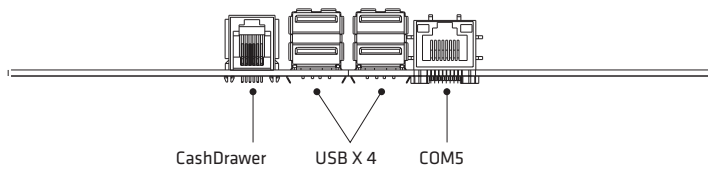
APEXA CORE			
Interface			
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Display	2 x Displayport(MiniDP/USB-C Altmode)		
USB	Front 6, Rear 4 6 (4 x USB 2.0, 1 x 24V Powered USB, 1 x 12V Powered USB) 4 (2 x USB 3.0, 1 x USB 2.0, 1 x USB-C)		
Serial	5 (COM1 RJ45 , with 5V / 12V Power Output on 6 Pins, BIOS) (COM2~3 RJ-45 , Full Signal) (COM4 MiniDP, Only TX / RX, 12V Power Output, Reserved for CDP) (COM6 PinHeader, Only TX / RX, 5V Power Output, Reserved for MSR)		
Cash Drawer Port	-		
LAN	1 x Gigabit Ethernet (RJ-45)		
Audio	1 x Line-out		
Power DC-IN	3 Pin DIN Jack		
Extension Slot	2 x M.2 for WiFi / BT, SSD		
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Cash Drawer Port	1 x RJ-11 (GPIO Communication)		
LAN	1 x Gigabit Ethernet (RJ-45)		
Audio	1 x Line-out		
Power DC-IN	4 Pin DIN Jack		
Extension Slot	2 x M.2 for WiFi / BT, SSD		

APEXA CORE Specification

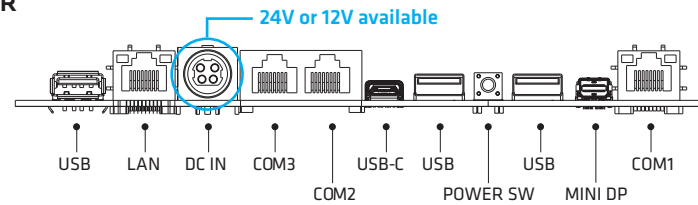
APEXA CORE	
Power	
	APEXA CORE TL (24V)
Power Supply	Adapter 24V, 2.5A (Normal) / 24V, 6.35A(EXT IO BOX Option)
	APEXA CORE EL (24V)
Power Supply	Adapter 12V, 5A (Normal) / 24V, 6.35A(EXT IO BOX Option)
Physical & Environmental	
	APEXA CORE TL-1500 / 1560
Operating Temperature	0 °C ~ 60 °C at 10% to 90% Humidity
Storage Temperature	-20 °C ~ 80 °C at 10% to 90% Humidity
Dimensions (W x H x D)	TBD
Packing Dimensions (W x H x D)	TBD
Net Weight	TBD
Packing Weight	TBD
Certification	TBD
Color	TBD

APEXA CORE I/O Ports

FRONT



REAR



DC IN Voltage		+24V	+12V
USB	USB 2.0	x 4	x 4
	+24V Powered USB	x 1	NO
	+12V Powered USB	x 1	NO
Serial	RJ45-Com5	NO	x 1
Cash Drawer	RJ12	NO	x 1

APEXA CORE Specification

APEXA CORE	
Options & Peripherals	
	APEXA CORE TL- 1560
	APEXA CORE EL- 1560
2nd Display	9.7" / 10.1" / 13.3"
Customer Display	VFD, 20 Columns x 2 Lines
External IO BOX	Support only 12V
Storage	NVMe M.2 128G
Magnetic Stripe Reader	Comply with ISO 7811, Support 1 & 2 & 3 Track
Smart Card Reader	EMV Level 1
Dallas	Dallas i-button Reader
Fingerprint	Yes
Wall Mount Kit	VESA-Compatible, 75 x 75(mm), 100 x 100(mm)
Serial Conversion Cable	RJ-45 to D-sub 9
Speaker	2 x 1W (Stereo) (Factory Option)
WiFi / BT	M.2 for WiFi / BT
TPM	Support
	APEXA CORE TL-1500
	APEXA CORE EL-1500
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Speaker	2 x 1W (Stereo) (Factory Option)
Wifi / BT	M.2 for WiFi / BT
TPM	Support

*Specifications may change without prior notice.