Your Smart Interactive Solution Partners

Customer Specification

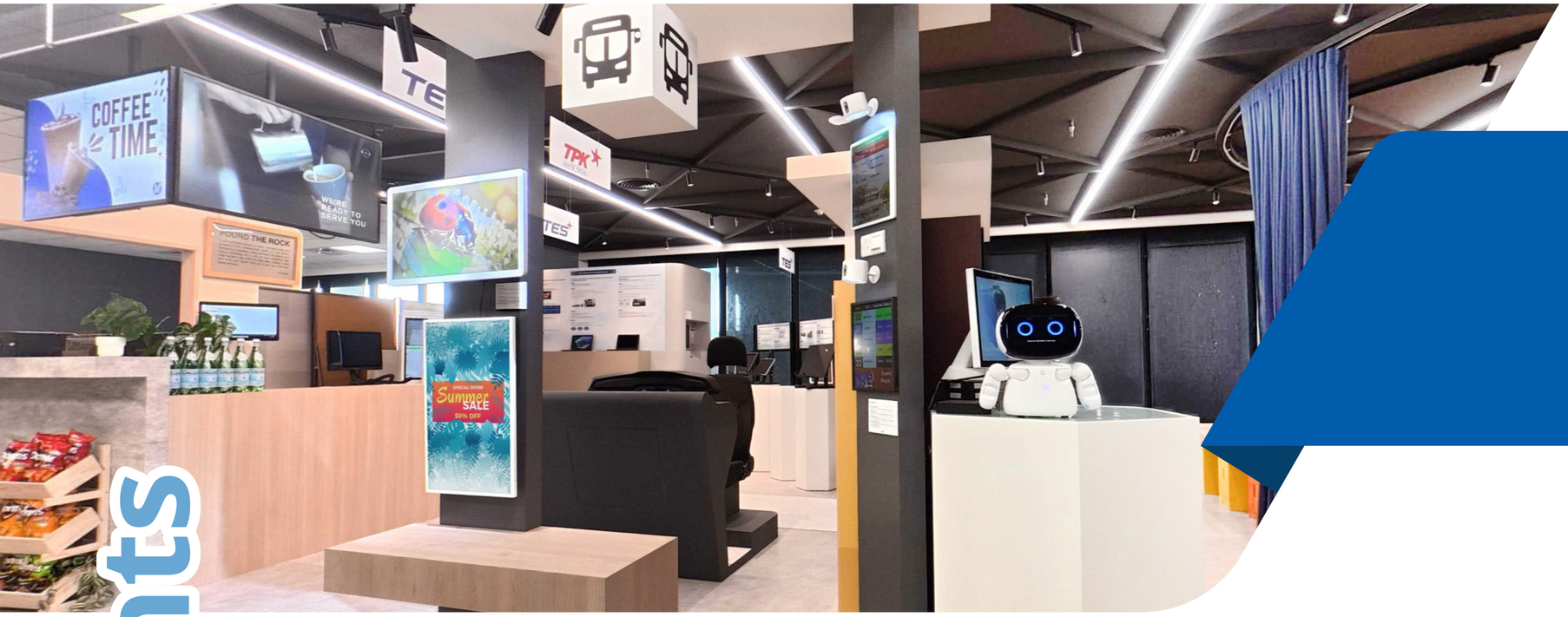
Engineering Design

Prototype Approval

Production

Post Sale Support





Contents

Table of Contents

01 About TES

02 Global Presence

03 R&D Capabilities

04 Product Portfolio

05 Product Specifications

06 Contact Us

About TES

30+ Years of Excellence in Intelligent Touch Display Equipment

With over 30 years of experience in touch system integration design and manufacturing, TES TEC has become a world-leading supplier of intelligent touch display equipment. We are deeply committed to the research, development, design, manufacturing, and after-sales support of core technologies like touch screen displays, PCBA design, and system integration. We proudly offer highly customized services to our global clients. With manufacturing facilities in both China and Thailand, TES TEC serves clients around the world.

Delivering Innovative Touch Solutions for Global Brands

We work with renowned global brands, providing innovative touch solutions for businesses across various industries. Driven by a commitment to innovation, TES TEC continuously invests in R&D, optimizes our supply chain, and promotes green manufacturing. We are dedicated to advancing the intelligent transformation of the industry, upholding strict quality standards to ensure exceptional products. Our goal is to create extraordinary value for our global customers with high-quality products and services.

755+
Customers

2.2 Million+
Installation / Years

50+
Countries Marketed

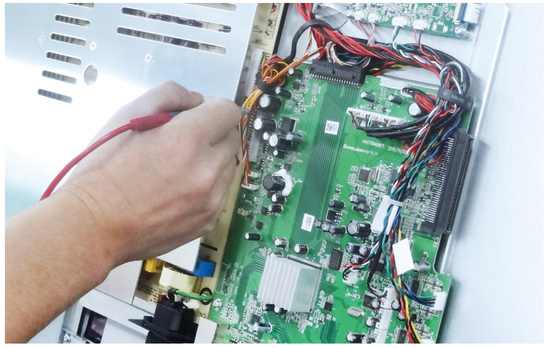
135+
Global Patents











Global Presence

TES Worldwide

Remote Sales Offices

We have remote sales offices in multiple sites throughout Japan, the Netherlands, Italy, the UK, and the United States.

Service Center

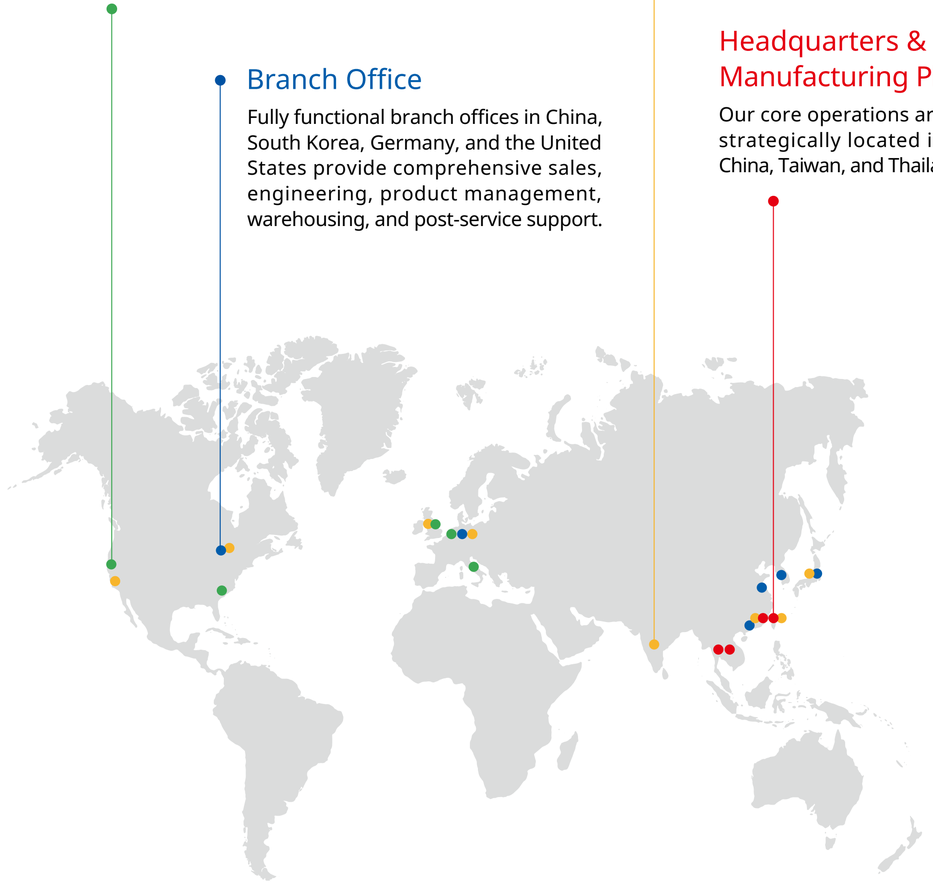
Global service centers offer depot repair and timely technical support to better serve customers locally.

Branch Office

Fully functional branch offices in China, South Korea, Germany, and the United States provide comprehensive sales, engineering, product management, warehousing, and post-service support.

Headquarters & Manufacturing Plants

Our core operations are strategically located in China, Taiwan, and Thailand.



Global Manufacturing



Taiwan Since 1994

Product screen size: 7" – 55"

Throughput per month:

- Monitor & AIO 21.3K
- Medical 7K



Thailand Phase 1 Since 2024

Product screen size: 7" – 86"

Throughput per month:

- Monitors & AIO 8K
- PCAP Lamination 11K
- TDM Lamination 11K



China Since 2000

Product screen size: 7" – 86"

Throughput per month:

- Automotive TDM 80K
- Lamination 20K
- Bonding 10K
- BLU & LCM Assy 10K
- Monitors & AIO 60K



Thailand Phase 2 (Commence in 2026H2)

Initial Phase

- Monitors & AIO (Size 7"~55") 60K
- Lamination (Size 7"~32") 20K
- Kiosk 5K
- SMT Line 300K

Future Expansion

- Production Line 1
- Lamination line 2
- Capacity 60K units/month/shift



Self-owned and built manufacturingfacilities in China and Thailand

R&D Capabilities

Core Competences

Optimal Integration
Synergizing the entire supply chain, from touch sensors and mainboards to certified automotive displays, for maximum efficiency.

Customer Centricity
TES provides tailored products and services, backed by a comprehensive support team including robust R&D, dedicated sales, and experienced FAEs.

R&D Capabilities
TES's robust R&D team, comprising experts in optics, mechanics, electronics, software, and system integration, drives innovation.

Full Product Range
TES offers a wide range of touch solutions, including custom and semi-custom options,to fit diverse market applications.

Agile Delivery
TES provides competitive lead times, enabling continuous feedback, adaptation and improvements throughout development.

World-Class Quality
TES products meet high standards, performing exceptionally in terms of reliability, durability, and overall performance.

Innovative Ecosystem
TES offers early access to collaborative partnerships for prompt, innovative solutions.

Global Strategy
TES focuses on long-term, sustainable business practices, operating globally to diversify risk and optimize resource utilization.



Manufacturing Capability



SMT
- Solder paste printer
- Solder paste inspection
- Mounter
- Reflow soldering
- Auto-optical inspection



Bonding
- Optical and air bonding
- Maximum panel size to 32”
- 99.5% first pass yield rate



Lamination
- Maximum panel size to 32”
- 98.5% first pass yield rate
- +/- 0.2 mm precision



LCM Assembly
- Cell & BLU assembly
- Customizable BLU module



System Assembly
- Monitor
- All-in-One touch PC
- Box PC
- Kiosk

Manufacturing Capability : Complete In-house Assembly



LCM
- Open cell and backlight assembly
- Flexible backlight module to meet diverse brightness and color requirements
- Cost-effective, yet reliable in quality and performance
- Shorter verification and transit time



System
- Dedicated assembly line for various products
- Traceable workflow from the board level to the complete system
- Seamless product development rom initial design through to massive production
- Integrated S/W and F/W capability to fulfill customization demands
- Capable of responding to diverse product needs and quantitative requests

OEM Capability : Engineering

R&D Capabilities
Panel&TP module

- Brightness
- Sunlight readable
- Max. RGB
- Gamma scale enhancement
- Dimming control
- Switchable PF
- Air Touch (Non-contact)
- Water immunity
- Surface coating
- Vandal-proof
- Force sensing
- OCA

Mechanical team
Design

- Industrial design
- Modular design
- Anti-bacterial
- IP68 Ingress protection
- Heat dissipation
- Tooling design

Electronics team
MB&AD&Power

- Power management
- High-current protection
- X86 platform
- RISC platform
- Microphone test & management
- Video test & management
- Audio output management

Software team
SW&FW&Customization

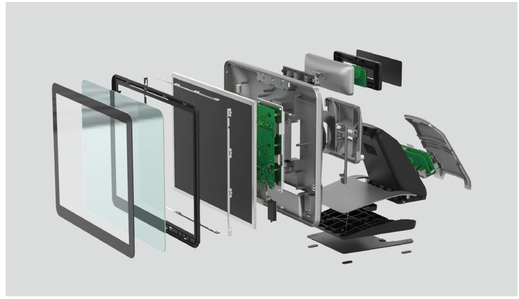
- Android OS
- Cent OS
- Touch FW customization
- Scaler FW customization
- DICOM FW adjustment
- Active/Passive touch pen integration
- Audio output management
- BT / WiFi

Consumer Touchscreen ODM Capability

- Ultimate Product Design and Integration
- Precise Human-Machine Interaction Experience
- High Performance and Low-Latency Technology
- Top-Tier Manufacturing Process and Yield Control
- Rigorous Full-Lifecycle Verification
- Globalized Distributed Production and Supply Chain



OEM Capability



Complete manufacturing services are provided by our engineering and functional teams, specializing in Optical, Electrical, Mechanical, and Industrial Design, from component-level to finished products.

ODM Capability : New Product Introduction

Product Planning
- Feasibility analysis
- Development request

Product Kick-off
- Product features and specifications

Prototype Sample
- Sampling
- Pre-engineering verification
- DFM

Engineering Verification
- Tolerance verification
- Certifications
- Derating test
- MTBF

Design Verification
- WI and SOP verification
- Certifications
- DFM
- MTBF

Pilot Verification
- Final WI and SOP verification
- MP report
- MTBF report
- ORT
- Final MFG test verification

Massive Production
- Reliability test
- EOL plan
- EOL spare parts plan

Product Portfolio

Application

TES TEC offers ODM and OEM services for a wide range of applications. Our products are used in many different industries, including:



Retail
Point-of-sale (POS) systems, self-service kiosks and digital signage



Finance
ATMs, transaction terminals, and bank information kiosks



Industrial Automation
Human-machine interfaces (HMI) and control panels



Logistics
Handheld scanners and inventory management devices



Transportation
Kiosks for ticketing and service payments, and digital signage for advertisements



Education &Office
Interactive display, all-in-one PCs and visitor management systems



Automotive
Smart Cockpits, Center Infotainment Display



Medical
Patient monitoring systems, diagnostic imaging equipment, and hospital check-in kiosks



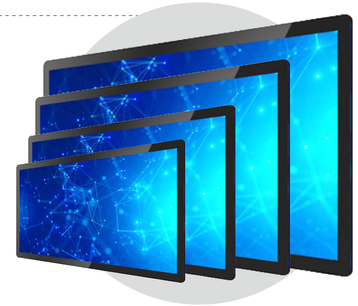
Fitness
Gym equipment, including treadmills, ellipticals, and interactive finess mirror



Gaming
Arcade machines and casino gaming system

APM series

Full Range of Open Frame Touch Monitor



- 10.1” / 12.1” / 15” / 15.6” / 19” / 21.5” / 23.8” TFT LCD.
- 250 nits ~ 500 nits for Indoor / 1000 nits, 1500 nits for outdoor use.
- Superb reliability & durability — up to IP66 & IK10.
- Wide operating temperature range: -20°C to 60°C.
- Multiple touch modes – normal, glove & touch-through glass.
- Cable management bracket stand.



GSM series

Gaming Open Frame Touch Monitor

- Wide-viewing LCD with 300 nits and 4000-1 contrast.
- Hover touch registers inputs through wet hands, spills, or surface residue.
- IP65& IK08 rated for durability.
- Anti-Glare technology cuts reflections for clarity.

HCM Series

Medical Open Frame Touch Monitor



- AG/AF Coatings cut reflections and smudges.
- IP65 & 7H Hardness endures daily disinfection.
- VESA-compatible for easy installation.
- Medical-Grade power components for safety use.



LAM / TDS series

Zero Bezel Digital Signage

- 32” TFT LCD.
- Slim profile with optional narrow bezel for modern design.
- Advanced touch technology supports 30-point.
- Supports landscape & portrait orientation.

* Please verify specifications before quoting. The guide is intended for reference purpose only.
All product specifications and information are subject to change without notices.

IEM series

Seamless Bezel Desktop Touch Monitor



- Selection of 15.6” and 21.5” TFT LCD sizes.
- Seamless bezel and rounded aesthetic.
- Features add-on capabilities like a 3-track MSR and a 2MP camera.
- Cable management bracket stand.
- Ideal for retail point-of-sale or point-of-service.



TAM series

Desktop Touch Monitor

- 15” / 17” / 19” TFT LCD.
- 4:3 / 5:4 rectangular touch monitor.
- Compatible with a stand for desktop usage.
- Front Panel IP65 Compliant.
- Equipped with Kensington Lock for security.

TEF/TEM series

16:9 Rectangular Touch Monitor/Desktop Touch Monitor



- 15.6” / 21.5” / 27” TFT LCD.
- Slim profile with narrow bezel for modern design.
- Seamless touch support for normal, glove, and through-glass use.
- Supports landscape & portrait orientation.



TGF series

Small Open Frame Touch Monitor

- 7” TFT LCD.
- 850 nits screens deliver visibly better clarity.
- IK07 rated for impact protection.
- Wide operating temperature range: -20°C to 60°C.
- Multiple rear-mounting and side mounting holes are available.

TSF/TSM series

4:3 Rectangular Touch Monitor/Desktop Touch Monitor



- 15” / 17” / 19” TFT LCD.
- Reliable IP65 dust/water and IK08 impact protection.
- Flexible mounting via rear VESA, side brackets, or desktop stand.
- Multiple touch modes -normal, glove & touch-through glass.



IEC series

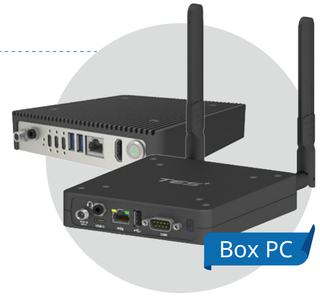
Android / X86 All-in-one Touchscreen Computer

- 15.6” / 21.5” TFT LCD.
- Powerful processor: Intel® Celeron® J6412(x86) or MediaTek MT8390 (Android).
- 4GB/8GB DDR4 memory for smooth multitasking.
- Reliable IP65 dust/water and IK07 impact protection.
- Supports add-ons including a 3-track MSR, 2MP camera and desktop stand.

TBX series

Windows & Android OS Media Box

- Processor: Intel® Celeron® J6412 / MediaTek MT8390 / MediaTek MT8371.
- 8GB LPDDR4 / DDR5 memory.
- Storage choices: 64GB or 128GB.
- OS: Window 10 / Windows 11 / Linux / Android 13 / Android 15.
- Rich I/O simplifies cabling and peripheral connections.





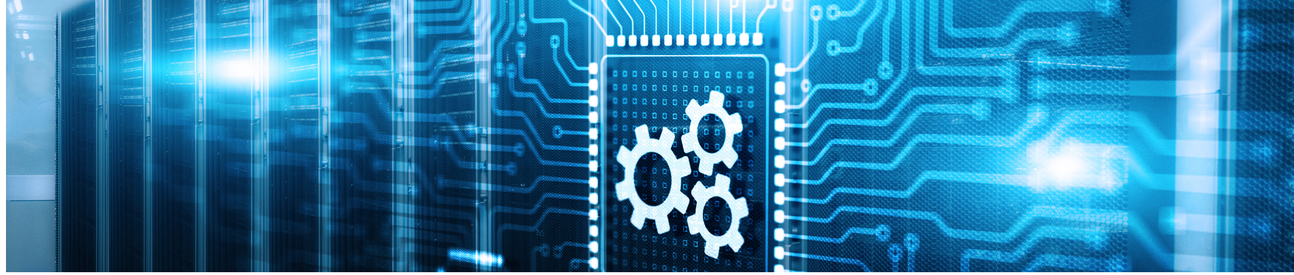
TPMF series

Cost-effective Open Frame Touch Monitor

- 15.6”/ 19” / 21.5“ TFT LCD.
- Complies with IK08 impact resistance standard.
- Excellent air duct design promotes airflow and prevents overheating.
- Modular design for easy maintenance and upgrades.
- Supports VESA and flexible rear-cover mounting for diverse embedded installations.

* Please verify specifications before quoting. The guide is intended for reference purpose only.
All product specifications and information are subject to change without notices.

Product Specifications








APM series 18-20
10.1” / 12.1” / 15” / 15.6” / 19” / 21.5” / 23.8” TFT LCD

GSM series 21
27" TFT LCD

HCM Series 22
23.8" TFT LCD

LAM series 23
32” TFT LCD

TDS series 24
32” TFT LCD

IEM series 25
15.6" / 21.5" TFT LCD

TAM series 26
15” / 17” / 19” TFT LCD

TEF series 27
15.6” / 21.5” / 27” TFT LCD






TEM series 28
15.6” / 21.5” / 27” TFT LCD

TGF series 29
7” TFT LCD

TSF series 30-31
15” / 17” / 19” TFT LCD

TSM series 32-33
15” / 17” / 19” TFT LCD

IEC series 34-35
15.6” / 21.5” TFT LCD

TBX series 36-37
Processor: Intel® Celeron® J6412 / MediaTek MT8390 / MediaTek MT8371

TPMF series 38
15.6“/ 19” / 21.5“ TFT LCD

APM







Model Name	APM-100 APM-100B2014P11001	APM-100 Semi-outdoor APM-100B2014S11001	APM-120 APM-120B2014P11001
Touch & Display Parameters			
Screen Size	10.1" TFT LCD	10.1" TFT LCD	12.1" TFT LCD
Max Resolution	1280 x 800	1280 x 800	1024 x 768
Contrast Ratio (Typ.)	1300: 1	1000: 1	1000: 1
Display Brightness (Typ., cd/m^2)	425 (LCD), 340 (PCAP)	1500 (LCD), 1270 (PCAP)	425 (LCD), 340 (PCAP)
Viewing Angle (CR>10, Typ., L/R/U/D, °)	85 / 85 / 85 / 85	89 / 89 / 89 / 89	89 / 89 / 89 / 89
Cover Glass Surface Hardness	7H	7H	7H
Touch Screen	PCAP	PCAP	PCAP
Number of Simultaneous Touch (es)	10 Pts	10 Pts	10 Pts
Touch Interface	USB-B	USB-C	USB-B
OSD Touch	Yes	Yes	Yes
Hover Touch	2 Pts	None	2 Pts
Surface Treatment	None	AG, AF	None
I/O Ports			
USB Port	1 x USB-B	1 x USB-C	1 x USB-B
Video Port	1 x VGA, 1 x HDMI, 1 x DP	1 x HDMI	1 x VGA, 1 x HDMI, 1 x DP
Built-in Speaker	None	None	None
Audio Port	1 x 3.5mm Audio Output Jack	1 x 3.5mm Audio Output Jack	1 x 3.5mm Audio Output Jack
Power Input	DC 12V, 2.1mm Jack	DC 12V, 2.1mm Jack	DC 12V, 2.1mm Jack
Power Supply	External, 12V 36W	External, 12V 36W	External, 12V 36W
Other Interfaces	1 x RJ45 (for Remote Key)	1 x RJ11 (for Remote Key)	1 x RJ45 (for Remote Key)
Mechanical Parameters			
Housing Color (Front, Back)	Black	Black	Black
Construction	Glass, ABS, SECC	Glass, ABS, SECC	Glass, ABS, SECC
Product Dimensions (W x H x D mm)	260.7 x 183.4 x 39.4	256.4 x 176.6 x 41.1	308.3 x 247.8 x 41.3
Net Weight (kg)	1.4	1.75	2.2
Gross Weight (kg)	2.4	2.95	4.0
Packing Dimensions (W x H x D mm)	370 x 325 x 160	295 x 355 x 145	435 x 355 x 165
VESA Mount (mm)	100 x 100	75 x 75	100 x 100
Impact Resistance (Front, Center)	IK08	IK10	IK08
Ingress Protection (Front)	IP65	IP66	IP65
Environment & Certifications			
Certifications	CE, CB, FCC, UL/cUL, CCC, UKCA	CE, CB, FCC, UL/cUL, CCC, UKCA	CE, CB, FCC, UL/cUL, CCC, UKCA
Operating Temp/Humidity	0°C ~ 50°C, 20% ~ 90% RH (Non-condensing)	-20°C ~ 60°C, 20% ~ 80% RH (Non-condensing)	0°C ~ 40°C, 20% ~ 90% RH (Non-condensing)
Storage Temp/Humidity	-20°C ~ 60°C, 10% ~ 90% RH (Non-condensing)	-30°C ~ 80°C, 10% ~ 90% RH (Non-condensing)	-20°C ~ 60°C, 10% ~ 90% RH (Non-condensing)
Accessories			
Remote Key	Yes	Yes	Yes
Cables	1 x USB A to B, 1 x VGA, 1 x HDMI, 1 x DP	1 x USB C to A, 1 x HDMI	1 x USB A to B, 1 x VGA, 1 x HDMI, 1 x DP
Power Cord	1 x UK	1 x US	1 x US
Power Adapter	Yes	Yes	Yes
Bezel Brackets	Yes	Yes	Yes
Desktop Stand	None	None	None







Model Name	APM-150 APM-150B2012P11001	APM-151 APM-151B2013P11001	APM-151 Semi-outdoor APM-151B4007Z11001
Touch & Display Parameters			
Screen Size	15" TFT LCD	15.6" TFT LCD	15.6" TFT LCD
Max Resolution	1024 x 768	1920 x 1080	1920 x 1080
Contrast Ratio (Typ.)	800: 1	1000: 1	800: 1
Display Brightness (Typ., cd/m^2)	350 (LCD), 205 (PCAP)	385 (LCD), 305 (PCAP)	935 (LCD), 765 (PCAP)
Viewing Angle (CR>10, Typ., L/R/U/D, °)	80 / 80 / 70 / 80	89 / 89 / 89 / 89	89 / 89 / 89 / 89
Cover Glass Surface Hardness	7H	6H	7H
Touch Screen	PCAP	PCAP	PCAP
Number of Simultaneous Touch (es)	10 Pts	10 Pts	10 Pts
Touch Interface	USB-B	USB-B	USB-B
OSD Touch	Yes	Yes	Yes
Hover Touch	2 Pts	2 Pts	None
Surface Treatment	None	None	AG, AF
I/O Ports			
USB Port	1 x USB-B	1 x USB-B	1 x USB-B
Video Port	1 x VGA, 1 x HDMI, 1 x DP	1 x VGA, 1 x HDMI, 1 x DP	1 x VGA, 1 x HDMI, 1 x DP
Built-in Speaker	None	None	None
Audio Port	1 x 3.5mm Audio Output Jack	1 x 3.5mm Audio Output Jack	1 x 3.5mm Audio Output Jack
Power Input	DC 12V, 2.1mm Jack	DC 12V, 2.1mm Jack	DC 12V, 2.1mm Jack
Power Supply	External, 12V 36W	External, 12V 36W	External, 12V 90W
Other Interfaces	1 x RJ45 (for Remote Key)	1 x RJ45 (for Remote Key)	1 x RJ45 (for Remote Key)
Mechanical Parameters			
Housing Color (Front, Back)	Black	Black	Black
Construction	Glass, ABS, SECC	Glass, ABS, SECC	Glass, ABS, SECC
Product Dimensions (W x H x D mm)	364 x 290.9 x 41.3	398.4 x 245.8 x 42.2	398.4 x 245.8 x 42.4
Net Weight (kg)	2.93	2.5	2.7
Gross Weight (kg)	5.23	4.1	4.5
Packing Dimensions (W x H x D mm)	452 x 376 x 150	485 x 370 x 150	485 x 370 x 150
VESA Mount (mm)	100 x 100	100 x 100	100 x 100
Impact Resistance (Front, Center)	IK08	IK08	IK08
Ingress Protection (Front)	IP65	IP65	IP65
Environment & Certifications			
Certifications	CE, CB, FCC, UL/cUL, CCC, UKCA	CE, CB, FCC, UL/cUL, CCC, UKCA	CE, CB, FCC, UL/cUL, UKCA
Operating Temp/Humidity	0°C ~ 50°C, 20% ~ 80% RH (Non-condensing)	0°C ~ 50°C, 20% ~ 90% RH (Non-condensing)	0°C ~ 60°C, 20% ~ 90% RH (Non-condensing)
Storage Temp/Humidity	-20°C ~ 60°C, 10% ~ 90% RH (Non-condensing)	-20°C ~ 60°C, 10% ~ 90% RH (Non-condensing)	-20°C ~ 70°C, 10% ~ 90% RH (Non-condensing)
Accessories			
Remote Key	Yes	Yes	Yes
Cables	1 x USB A to B, 1 x VGA, 1 x HDMI, 1 x DP	1 x USB A to B, 1 x VGA, 1 x HDMI, 1 x DP	1 x USB A to B, 1 x VGA, 1 x HDMI, 1 x DP
Power Cord	1 x UK	1 x 3C	1 x US, 1 x EU
Power Adapter	Yes	Yes	Yes
Bezel Brackets	Yes	Yes	Yes
Desktop Stand	None	None	None

*Please verify specifications before quoting. The guide is intended for reference purpose only. All product specifications and information are subject to change without notices.

APM






Model Name	APM-191 APM-191B2012P11001	APM-220 APM-220B2011P11001	APM-220 Semi-outdoor APM-220B4007Z11001	APM-240 APM-240B2011P11001
Touch & Display Parameters				
Screen Size	19" TFT LCD	21.5" TFT LCD	21.5" TFT LCD	23.8" TFT LCD
Max Resolution	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
Contrast Ratio (Typ.)	3000: 1	3000: 1	5000: 1	3000: 1
Display Brightness (Typ., cd/m^2)	300 (LCD), 235 (PCAP)	215 (LCD), 170 (PCAP)	935 (LCD), 765 (PCAP)	215 (LCD), 170 (PCAP)
Viewing Angle (CR>10, Typ., L/R/U/D, °)	85 / 85 / 85 / 85	89 / 89 / 89 / 89	89 / 89 / 89 / 89	89 / 89 / 89 / 89
Cover Glass Surface Hardness	7H	7H	7H	7H
Touch Screen	PCAP	PCAP	PCAP	PCAP
Number of Simultaneous Touch (es)	10 Pts	10 Pts	10 Pts	10 Pts
Touch Interface	USB-B	USB-B	USB-B	USB-B
OSD Touch	Yes	Yes	Yes	Yes
Hover Touch	2 Pts	2 Pts	None	None
Surface Treatment	None	None	AG, AF	None
I/O Ports				
USB Port	1 x USB-B	1 x USB-B	1 x USB-B	1 x USB-B
Video Port	1 x VGA, 1 x HDMI, 1 x DP	1 x VGA, 1 x HDMI, 1 x DP	1 x VGA, 1 x HDMI, 1 x DP	1 x VGA, 1 x HDMI, 1 x DP
Built-in Speaker	None	None	None	None
Audio Port	1 x 3.5mm Audio Output Jack	1 x 3.5mm Audio Output Jack	1 x 3.5mm Audio Output Jack	1 x 3.5mm Audio Output Jack
Power Input	DC 12V, 2.1mm Jack	DC 12V, 2.1mm Jack	DC 12~24V, 2.1mm Jack	DC 12V, 2.1mm Jack
Power Supply	External, 12V 36W	External, 12V 36W	External, 12V 90W	External, 12V 36W
Other Interfaces	1 x RJ45 (for Remote Key)	1 x RJ45 (for Remote Key)	1 x RJ45 (for Remote Key)	1 x RJ45 (for Remote Key)
Mechanical Parameters				
Housing Color (Front, Back)	Black	Black	Black	Black
Construction	Glass, ABS, SECC	Glass, ABS, SECC	Glass, ABS, SECC	Glass, ABS, SECC
Product Dimensions (W x H x D mm)	479.2 x 285.0 x 42.05	519.9 x 314.9 x 42.4	519.9 x 314.9 x 42.4	575.1 x 347 x 42.4
Net Weight (kg)	4.6	4.4	4.6	5.8
Gross Weight (kg)	6.7	6.3	7.7	8.0
Packing Dimensions (W x H x D mm)	517 x 374 x 150	610 x 405 x 160	610 x 405 x 160	685 x 455 x 150
VESA Mount (mm)	100 x 100	100 x 100	100 x 100	100 x 100
Impact Resistance (Front, Center)	IK08	IK08	IK08	IK08
Ingress Protection (Front)	IP65	IP65	IP65	
Environment & Certifications				
Certifications	CE, CB, FCC, UL/cUL, UKCA	CE, CB, FCC, UL/cUL, CCC	CE, CB, FCC, UL/cUL, CCC, UKCA	CE, CB, FCC, UL/cUL, CCC
Operating Temp/Humidity	0°C ~ 40°C, 20% ~ 90% RH (Non-condensing)	0°C ~ 40°C, 20% ~ 90% RH (Non-condensing)	0°C ~ 60°C, 20% ~ 90% RH (Non-condensing)	0°C ~ 40°C, 20% ~ 90% RH (Non-condensing)
Storage Temp/Humidity	-20°C ~ 60°C, 10% ~ 90% RH (Non-condensing)	-20°C ~ 60°C, 10% ~ 90% RH (Non-condensing)	-20°C ~ 70°C, 10% ~ 90% RH (Non-condensing)	-20°C ~ 60°C, 10% ~ 90% RH (Non-condensing)
Accessories				
Remote Key	Yes	Yes	Yes	Yes
Cables	1 x USB A to B, 1 x VGA, 1 x HDMI, 1 x DP	1 x USB A to B, 1 x VGA, 1 x HDMI, 1 x DP	1 x USB A to B, 1 x VGA, 1 x HDMI, 1 x DP	1 x USB A to B, 1 x VGA, 1 x HDMI, 1 x DP
Power Cord	1 x US	1x EU	1 x US, 1 x EU	1 x UK
Power Adapter	Yes	Yes	Yes	Yes
Bezel Brackets	Yes	Yes	Yes	Yes
Desktop Stand	None	None	None	None

GSM



Model Name	GSM-270 GSM-270B2014G1F002
Touch & Display Parameters	
Screen Size	27" TFT LCD
Max Resolution	1920 x 1080
Contrast Ratio (Typ.)	4000: 1
Display Brightness (Typ., cd/m^2)	350 (LCD), 300 (PCAP)
Viewing Angle (CR>10, Typ., L/R/U/D, °)	89 / 89 / 80 / 80
Cover Glass Surface Hardness	7H
Touch Screen	PCAP
Number of Simultaneous Touch (es)	10 Pts
Touch Interface	USB-B
OSD Touch	Yes
Hover Touch	Yes
Surface Treatment	AG
I/O Ports	
USB Port	1 x USB-B
Video Port	1 x VGA, 1 x HDMI, 1 x DP
Built-in Speaker	None
Audio Port	1 x 3.5mm Audio Output Jack
Power Input	AC 100~240V, 50/60Hz
Power Supply	12V 60W
Other Interfaces	1 x RJ45 (for Remote Key)
Mechanical Parameters	
Housing Color (Front, Back)	Black
Construction	Glass, SECC
Product Dimensions (W x H x D mm)	644.2 x 388.4 x 39.6
Net Weight (kg)	7.5
Gross Weight (kg)	10.7
Packing Dimensions (W x H x D mm)	762 x 517 x 174
VESA Mount (mm)	200 x 100
Impact Resistance (Front, Center)	IK08
Ingress Protection (Front)	IP65
Environment & Certifications	
Certifications	CE , UKCA , FCC , CB
Operating Temp/Humidity	0°C ~ 40°C, 20% ~ 90% RH (Non-condensing)
Storage Temp/Humidity	-20°C ~ 60°C, 10% ~ 90% RH (Non-condensing)
Accessories	
Remote Key	Yes
Cables	1 x USB A to B, 1 x VGA, 1 x HDMI, 1 x DP
Power Cord	1 x UL , 1 xUK , 1 x EU , 1 x AU
Power Adapter	Yes
Bezel Brackets	None
Desktop Stand	None

*Please verify specifications before quoting. The guide is intended for reference purpose only. All product specifications and information are subject to change without notices.

HCM



Model Name	HCM-24211P31002
Touch & Display Parameters	
Screen Size	23.8" TFT LCD
Max Resolution	1920 x 1080
Contrast Ratio (Typ.)	1000: 1
Display Brightness (Typ., cd/m^2)	290 (LCD), 232 (PCAP)
Viewing Angle (CR>10, Typ., L/R/U/D, °)	89 / 89 / 89 / 89
Cover Glass Surface Hardness	7H
Touch Screen	PCAP
Number of Simultaneous Touch (es)	10 Pts
Touch Interface	USB-B
OSD Touch	None
Hover Touch	None
Surface Treatment	AG, AF
I/O Ports	
USB Port	1 x USB-B, 4 x USB-A
Video Port	1 x DVI, 1 x HDMI, 1 x DP
Built-in Speaker	2 x 2W
Audio Port	1 x 3.5mm Audio Line-in Jack
Power Input	AC 100~240V, C13
Power Supply	Built-in
Other Interfaces	None
Mechanical Parameters	
Housing Color (Front, Back)	White
Construction	Glass, ABS, SECC
Product Dimensions (W x H x D mm)	566.58 x 452.06 x 279.68
Net Weight (kg)	8.47
Gross Weight (kg)	12.28
Packing Dimensions (W x H x D mm)	574 x 463 x 697
VESA Mount (mm)	100 x 100
Impact Resistance (Front, Center)	IK08
Ingress Protection (Front)	IP65
Environment & Certifications	
Certifications	CE, CB, cULus, UKCA, FCC, CCC, BSMI
Operating Temp/Humidity	0°C ~ 40°C, 20% ~ 90% RH (Non-condensing)
Storage Temp/Humidity	-20°C ~ 60°C, 10% ~ 90% RH (Non-condensing)
Accessories	
Remote Key	None
Cables	1 x USB A to B, 1 x DVI, 1 x HDMI, 1 x DP, 1 x 3.5mm Audio
Power Cord	1 x US (Medical), 1 x EU
Power Adapter	Built-in (Medical Grade)
Bezel Brackets	None
Desktop Stand	Yes

LAM





Model Name	LAM-320 LAM-320B1023XXXXXX	LAM-320HB LAM-320B1024P11001
Touch & Display Parameters		
Screen Size	32" TFT LCD	32" TFT LCD
Max Resolution	1920 x 1080	1920 x 1080
Contrast Ratio (Typ.)	1200: 1	4000: 1
Display Brightness (Typ., cd/m^2)	Min. Brightness 321 (ErP)	500(LCD), 400 (PCAP)
Viewing Angle (CR>10, Typ., L/R/U/D, °)	89 / 89 / 89 / 89	89 / 89 / 89 / 89
Cover Glass Surface Hardness	7H	7H
Touch Screen	PCAP	PCAP
Number of Simultaneous Touch (es)	30 Pts	30 Pts
Touch Interface	USB-B	USB-B
OSD Touch	Yes	Yes
Hover Touch	Yes	Yes
Surface Treatment	AG (Optional)	AG (Optional)
I/O Ports		
USB Port	1 x USB-B	1 x USB-B
Video Port	1 x VGA, 1 x HDMI, 1 x DVI, 1 x DP	1 x VGA, 1 x HDMI, 1 x DVI, 1 x DP
Built-in Speaker	None	None
Audio Port	None	None
Power Input	DC 24V, 2.1mm Jack	DC 24V, 2.1mm Jack
Power Supply	External, 24V 60W	External, 24V 60W
Other Interfaces	None	None
Mechanical Parameters		
Housing Color (Front, Back)	Black, Black	Black, Black
Construction	Glass, ABS, SECC	Glass, ABS, SECC
Product Dimensions (W x H x D mm)	742.4 x 436.85 x 64.2	742.4 x 436.85 x 64.2
Net Weight (kg)	10.0	9.6
Gross Weight (kg)	13.3	12.9
Packing Dimensions (W x H x D mm)	890 x 155 x 630	890 x 155 x 630
VESA Mount (mm)	200 x 200	200 x 200
Impact Resistance (Front, Center)	IK08	IK08
Ingress Protection (Front)	None	None
Environment & Certifications		
Certifications	CE, CB, FCC, UL/cUL, CCC, UKCA	CE, CB, FCC, UL/cUL, CCC, UKCA
Operating Temp/Humidity	0°C ~ 40°C, 20% ~ 90% RH (Non-condensing)	0°C ~ 40°C, 20% ~ 90% RH (Non-condensing)
Storage Temp/Humidity	-20°C ~ 60°C, 10% ~ 90% RH (Non-condensing)	-20°C ~ 60°C, 10% ~ 90% RH (Non-condensing)
Accessories		
Remote Key	Yes	Yes
Cables	1 x USB A to B, 1 x VGA, 1 x HDMI, 1 x DVI, 1 x DP	1 x USB A to B, 1 x VGA, 1 x HDMI, 1 x DVI, 1 x DP
Power Cord	1 x US	1 x US
Power Adapter	None	None
Bezel Brackets	None	None
Desktop Stand	None	None

*Please verify specifications before quoting. The guide is intended for reference purpose only. All product specifications and information are subject to change without notices.

TDS



Model Name	TDS-320 TDS-320XXXXXXX3101
Touch & Display Parameters	
Screen Size	32" TFT LCD
Max Resolution	1920 x 1080
Contrast Ratio (Typ.)	1200: 1
Display Brightness (Typ., cd/m^2)	360 (LCD), 320 (PCAP)
Viewing Angle (CR>10, Typ., L/R/U/D, °)	89 / 89 / 89 / 89
Cover Glass Surface Hardness	7H
Touch Screen	PCAP
Number of Simultaneous Touch (es)	30 Pts
Touch Interface	USB-B
OSD Touch	None
Hover Touch	None
Surface Treatment	None
I/O Ports	
USB Port	1 x USB-B
Video Port	1 x VGA, 1 x HDMI, 1 x DVI
Built-in Speaker	None
Audio Port	None
Power Input	DC 24V, 2.1mm Jack
Power Supply	External, 24V 60W
Other Interfaces	None
Mechanical Parameters	
Housing Color (Front, Back)	Black, Black
Construction	Glass, ABS, SECC
Product Dimensions (W x H x D mm)	781.54 x 476.14 x 66.8
Net Weight (kg)	14.3
Gross Weight (kg)	16.6
Packing Dimensions (W x H x D mm)	945 x 185 x 650
VESA Mount (mm)	None
Impact Resistance (Front, Center)	IK07
Ingress Protection (Front)	None
Environment & Certifications	
Certifications	CE, CB, FCC, UL/cUL
Operating Temp/Humidity	0°C ~ 40°C, 20% ~ 90% RH (Non-condensing)
Storage Temp/Humidity	-20°C ~ 60°C, 10% ~ 90% RH (Non-condensing)
Accessories	
Remote Key	None
Cables	1 x USB A to B, 1 x VGA, 1 x HDMI, 1 x DVI
Power Cord	1 x US
Power Adapter	None
Bezel Brackets	None
Desktop Stand	None

IEM





Model Name	IEM-151 IEM-151C0023P1xxxx	IEM-221 IEM-221C0031P1xxxx
Touch & Display Parameters		
Screen Size	15.6" TFT LCD	21.5" TFT LCD
Max Resolution	1920 x 1080	1920 x 1080
Contrast Ratio (Typ.)	700:1	1000: 1
Display Brightness (Typ., cd/m^2)	385 (LCD), 305 (PCAP)	215 (LCD), 170 (PCAP)
Viewing Angle (CR>10, Typ., L/R/U/D, °)	89 / 89 / 89 / 89	89 / 89 / 89 / 89
Cover Glass Surface Hardness	7H	7H
Touch Screen	PCAP	PCAP
Number of Simultaneous Touch (es)	10 Pts	10 Pts
Touch Interface	USB-C	USB-C
OSD Touch	Yes	Yes
Hover Touch	2 Pts	2 Pts
Surface Treatment	None	None
I/O Ports		
USB Port	1 x USB-C	1 x USB-C
Video Port	1 x VGA, 1 x HDMI, 1 x DP	1 x VGA, 1 x HDMI, 1 x DP
Built-in Speaker	Yes	Yes
Audio Port	1 x 3.5mm Audio Line-in Jack	1 x 3.5mm Audio Line-in Jack
Power Input	1 x DC 12V, 2.1mm Jack, 1 x USB-C	1 x DC 12V, 2.1mm Jack, 1 x USB-C
Power Supply	External, 12V 60W	Built-in, 12V 60W
Other Interfaces	1 x RJ11 (for Remote Key)	1 x RJ11 (for Remote Key)
Mechanical Parameters		
Housing Color (Front, Back)	Black	Black
Construction	Glass, ABS	Glass, ABS
Product Dimensions (W x H x D mm)	223.5 x 369 x 27.2	308 x 511 x 37.9
Net Weight (kg)	1.805	4.04
Gross Weight (kg)	2.8	6.5
Packing Dimensions (W x H x D mm)	443 x 293 x 180	582 x 372 x 195
VESA Mount (mm)	100 x 100	100 x 100
Impact Resistance (Front, Center)	IK07	IK07
Ingress Protection (Front)	IP65	IP65
Environment & Certifications		
Certifications	CE, CB, UL/cUL, UKCA, FCC	CE, CB, UL/cUL, UKCA, FCC
Operating Temp/Humidity	0°C ~ 40°C, 20% ~ 80% RH (Non-condensing)	0°C ~ 40°C, 20% ~ 80% RH (Non-condensing)
Storage Temp/Humidity	-20°C ~ 60°C, 10% ~ 90% RH (Non-condensing)	-20°C ~ 60°C, 10% ~ 90% RH (Non-condensing)
Accessories		
Remote Key	Yes	Yes
Cables	1 x USB-C, 1 x VGA, 1 x HDMI, 1 x DP	1 x USB-C, 1 x VGA, 1 x HDMI, 1 x DP
Power Cord	1 x US, 1 x UK, 1 x EU, 1 x TW	1 x US, 1 x UK, 1 x EU, 1 x TW
Power Adapter	Yes	Yes
Bezel Brackets	None	None
Desktop Stand	Yes	Yes

*Please verify specifications before quoting. The guide is intended for reference purpose only. All product specifications and information are subject to change without notices.

TAM







Model Name	TAM-150 TAM-150B1062P11003	TAM-170 TAM-170A1062P11001	TAM-190 TAM-190B1061P11001
Touch & Display Parameters			
Screen Size	15" TFT LCD	17" TFT LCD	19" TFT LCD
Max Resolution	1024 x 768	1280 x 1024	1280 x 1024
Contrast Ratio (Typ.)	800: 1	1000: 1	1000: 1
Display Brightness (Typ., cd/m^2)	300 (LCD), 235 (PCAP)	215 (LCD), 170 (PCAP)	215 (LCD), 170 (PCAP)
Viewing Angle (CR>10, Typ., L/R/U/D, °)	80 / 80 / 70 / 80	85 / 85 / 80 / 80	89 / 89 / 89 / 89
Cover Glass Surface Hardness	7H	7H	7H
Touch Screen	PCAP	PCAP	PCAP
Number of Simultaneous Touch (es)	10 Pts	10 Pts	10 Pts
Touch Interface	USB-B	USB-B	USB-B
OSD Touch	None	None	None
Hover Touch	None	None	None
Surface Treatment	None	None	None
I/O Ports			
USB Port	1 x USB-B	1 x USB-B	1 x USB-B
Video Port	1 x VGA, 1 x HDMI, 1 x DP	1 x VGA, 1 x HDMI, 1 x DP	1 x VGA, 1 x HDMI, 1 x DP
Built-in Speaker	2 x 1W	2 x 1W	2 x 1W
Audio Port	1 x 3.5mm Audio Line-in Jack	1 x 3.5mm Audio Line-in Jack	1 x 3.5mm Audio Line-in Jack
Power Input	AC 100~240V, 50/60Hz, C13	AC 100~240V, 50/60Hz, C13	AC 100~240V, 50/60Hz, C13
Power Supply	Built-in	Built-in	Built-in
Other Interfaces	None	None	None
Mechanical Parameters			
Housing Color (Front, Back)	Black, Black	Black, Black	Black, Black
Construction	Glass, ABS, SECC	Glass, ABS, SECC	Glass, ABS, SECC
Product Dimensions (W x H x D mm)	350.8 x 306.5 x 202	386.8 x 341.9 x 202	431.8 x 390.9 x 219
Net Weight (kg)	4.5	5.6	6.6
Gross Weight (kg)	6.4	7.5	9.4
Packing Dimensions (W x H x D mm)	415 x 370 x 290	460 x 420 x 283	520 x 480 x 300
VESA Mount (mm)	100 x 100	100 x 100	100 x 100
Impact Resistance (Front, Center)	IK08	IK08	IK08
Ingress Protection (Front)	IP65	IP65	IP65
Environment & Certifications			
Certifications	CE, CB, cULus, UKCA, FCC	CE, CB, UL/cUL, UKCA, FCC	CE, CB, UL/cUL, UKCA, FCC
Operating Temp/Humidity	0°C ~ 40°C, 20% ~ 90% RH (Non-condensing)	0°C ~ 40°C, 20% ~ 90% RH (Non-condensing)	0°C ~ 40°C, 20% ~ 90% RH (Non-condensing)
Storage Temp/Humidity	-20°C ~ 60°C, 10% ~ 90% RH (Non-condensing)	-20°C ~ 60°C, 10% ~ 90% RH (Non-condensing)	-20°C ~ 60°C, 10% ~ 90% RH (Non-condensing)
Accessories			
Remote Key	None	None	None
Cables	1 x USB A to B, 1 x VGA, 1 x HDMI, 1 x DP, 1 x 3.5mm Audio	1 x USB A to B, 1 x VGA, 1 x HDMI, 1 x DP, 1 x 3.5mm Audio	1 x USB A to B, 1 x VGA, 1 x HDMI, 1 x DP, 1 x 3.5mm Audio
Power Cord	1 x US	1 x US	1 x US
Power Adapter	Built-in	Built-in	Built-in
Bezel Brackets	None	None	None
Desktop Stand	Yes	Yes	Yes

TEF







Model Name	TEF-151 TEF-151B2003P1XXXX	TEF-220 TEF-220B2001P1XXXX	TEF-270 TEF-270B2002P1XXXX
Touch & Display Parameters			
Screen Size	15.6" TFT LCD	21.5" TFT LCD	27" TFT LCD
Max Resolution	1920 x 1080	1920 x 1080	1920 x 1080
Contrast Ratio (Typ.)	1000: 1	1000: 1	3000: 1
Display Brightness (Typ., cd/m^2)	382 (LCD), 306 (PCAP)	212 (LCD), 170 (PCAP)	270 (LCD), 216 (PCAP)
Viewing Angle (CR>10, Typ., L/R/U/D, °)	89 / 89 / 89 / 89	89 / 89 / 89 / 89	89 / 89 / 89 / 89
Cover Glass Surface Hardness	7H	7H	7H
Touch Screen	PCAP	PCAP	PCAP
Number of Simultaneous Touch (es)	10 Pts	10 Pts	10 Pts
Touch Interface	USB-B	USB-B	USB-B
OSD Touch	Yes	Yes	Yes
Hover Touch	Yes	Yes	Yes
Surface Treatment	None	None	None
I/O Ports			
USB Port	1 x USB-B	1 x USB-B	1 x USB-B
Video Port	1 x VGA, 1 x HDMI, 1 x DP	1 x VGA, 1 x HDMI, 1 x DP	1 x VGA, 1 x HDMI, 1 x DP
Built-in Speaker	None	Yes	None
Audio Port	None	1 x 3.5mm Audio Line-in Jack	None
Power Input	DC 12V, 2.1mm Jack	DC 12V, 2.1mm Jack	DC 12V, 2.1mm Jack
Power Supply	Built-in, 12V 60W	Built-in, 12V 60W	Built-in, 12V 60W
Other Interfaces	1 x RJ11 (for Remote Key)	1 x RJ11 (for Remote Key)	1 x RJ11 (for Remote Key)
Mechanical Parameters			
Housing Color (Front, Back)	Black, Black or Silver (No Paint on Back)	Black, Black or Silver (No Paint on Back)	Black, Black or Silver (No Paint on Back)
Construction	Glass, SECC	Glass, SECC	Glass, SECC
Product Dimensions (W x H x D mm)	381 x 230.3 x 46	517.4 x 313.3 x 46	644.6 x 385 x 54.1
Net Weight (kg)	2	4.4	8.09
Gross Weight (kg)	4	6.8	9.78
Packing Dimensions (W x H x D mm)	455 x 315 x 150	610 x 405 x 160	762 x 527 x 174
VESA Mount (mm)	100 x 100	100 x 100	100 x 100
Impact Resistance (Front, Center)	IK07	IK07	IK07
Ingress Protection (Front)	IP54	IP65	IP54
Environment & Certifications			
Certifications	CE, CB, UL/cUL, UKCA, FCC	CE, CB, UL/cUL, UKCA, FCC	CE, CB, UL/cUL, UKCA, FCC
Operating Temp/Humidity	0°C ~ 40°C, 20% ~ 90% RH (Non-condensing)	0°C ~ 40°C, 20% ~ 90% RH (Non-condensing)	0°C ~ 40°C, 20% ~ 90% RH (Non-condensing)
Storage Temp/Humidity	-20°C ~ 60°C, 10% ~ 90% RH (Non-condensing)	-20°C ~ 60°C, 10% ~ 90% RH (Non-condensing)	-20°C ~ 60°C, 10% ~ 90% RH (Non-condensing)
Accessories			
Remote Key	Optional	Optional	Optional
Cables	1 x USB A to B, 1 x VGA, 1 x HDMI, 1 x DP	1 x USB A to B, 1 x VGA, 1 x HDMI, 1 x DP	1 x USB A to B, 1 x VGA, 1 x HDMI, 1 x DP
Power Cord	1 x Optional	1 x Optional	1 x Optional
Power Adapter	Built-in	Built-in	Built-in
Bezel Brackets	Yes	Yes	Yes
Desktop Stand	None	None	None

*Please verify specifications before quoting. The guide is intended for reference purpose only. All product specifications and information are subject to change without notices.

TEM







Model Name	TEM-151 TEM-151B2003P1XXXX	TEM-220 TEM-220B2001P1XXXX	TEM-220HB TEM-220B2002P1XXXX
Touch & Display Parameters			
Screen Size	15.6" TFT LCD	21.5" TFT LCD	21.5" TFT LCD
Max Resolution	1920 x 1080	1920 x 1080	1920 x 1080
Contrast Ratio (Typ.)	1000: 1	1000: 1	1000: 1
Display Brightness (Typ., cd/m^2)	382 (LCD), 306 (PCAP)	212 (LCD), 170 (PCAP)	300 (LCD), 255 (PCAP)
Viewing Angle (CR>10, Typ., L/R/U/D, °)	89 / 89 / 89 / 89	89 / 89 / 89 / 89	89 / 89 / 89 / 89
Cover Glass Surface Hardness	7H	7H	7H
Touch Screen	PCAP	PCAP	PCAP
Number of Simultaneous Touch (es)	10 Pts	10 Pts	10 Pts
Touch Interface	USB-B	USB-B	USB-B
OSD Touch	Yes	Yes	Yes
Hover Touch	Yes	Yes	Yes
Surface Treatment	None	None	AG
I/O Ports			
USB Port	1 x USB-B	1 x USB-B	1 x USB-B
Video Port	1 x VGA, 1 x HDMI, 1 x DP	1 x VGA, 1 x HDMI, 1 x DP	1 x VGA, 1 x HDMI, 1 x DP
Built-in Speaker	Yes	Yes	Yes
Audio Port	1 x 3.5mm Audio Line-in Jack	1 x 3.5mm Audio Line-in Jack	1 x 3.5mm Audio Line-in Jack
Power Input	DC 12V, 2.1mm Jack	DC 12V, 2.1mm Jack	DC 12V, 2.1mm Jack
Power Supply	Built-in, 12V 60W	Built-in, 12V 60W	Built-in, 12V 60W
Other Interfaces	1 x RJ11 (for Remote Key)	1 x RJ11 (for Remote Key)	1 x RJ11 (for Remote Key)
Mechanical Parameters			
Housing Color (Front, Back)	Black, Black	Black, Black or White, Wlite	Black, Black or White, Wlite
Construction	Glass, SECC	Glass, SECC	Glass, SECC
Product Dimensions (W x H x D mm)	381 x 285.3 x 202	517.4 x 351.7 x 219	517.4 x 351.7 x 219
Net Weight (kg)	4.3	6.6	6.6
Gross Weight (kg)	6.6	10.2	10.2
Packing Dimensions (W x H x D mm)	455 x 365 x 290	615 x 450 x 330	615 x 450 x 330
VESA Mount (mm)	100 x 100	100 x 100	100 x 100
Impact Resistance (Front, Center)	IK07	IK07	IK07
Ingress Protection (Front)	IP54	IP65	IP65
Environment & Certifications			
Certifications	CE, CB, UL/cUL, UKCA, FCC	CE, CB, UL/cUL, UKCA, FCC	CE, CB, UL/cUL, UKCA, FCC
Operating Temp/Humidity	0°C ~ 40°C, 20% ~ 90% RH (Non-condensing)	0°C ~ 40°C, 20% ~ 90% RH (Non-condensing)	0°C ~ 40°C, 20% ~ 90% RH (Non-condensing)
Storage Temp/Humidity	-20°C ~ 60°C, 10% ~ 90% RH (Non-condensing)	-20°C ~ 60°C, 10% ~ 90% RH (Non-condensing)	-20°C ~ 60°C, 10% ~ 90% RH (Non-condensing)
Accessories			
Remote Key	Optional	Optional	Optional
Cables	1 x USB A to B, 1 x VGA, 1 x HDMI, 1 x DP	1 x USB A to B, 1 x VGA, 1 x HDMI, 1 x DP	1 x USB A to B, 1 x VGA, 1 x HDMI, 1 x DP
Power Cord	1 x Optional	1 x Optional	1 x Optional
Power Adapter	Built-in	Built-in	Built-in
Bezel Brackets	None	None	None
Desktop Stand	Yes	Yes	Yes

TGF



Model Name	TGF-071 TGF-07110P41001
Touch & Display Parameters	
Screen Size	7" TFT LCD
Max Resolution	1024 x 600
Contrast Ratio (Typ.)	800: 1
Display Brightness (Typ., cd/m^2)	850 (LCD), 735 (PCAP)
Viewing Angle (CR>10, Typ., L/R/U/D, °)	85 / 85 / 85 / 85
Cover Glass Surface Hardness	7H
Touch Screen	PCAP
Number of Simultaneous Touch (es)	10 Pts
Touch Interface	USB-A
OSD Touch	None
Hover Touch	None
Surface Treatment	None
I/O Ports	
USB Port	1 x USB-A
Video Port	1 x VGA, 1 x HDMI
Built-in Speaker	2 x 2W
Audio Port	1 x 3.5mm Audio Line-in Jack
Power Input	DC 12V, 2.1mm Jack
Power Supply	External, 12V 24W
Other Interfaces	None
Mechanical Parameters	
Housing Color (Front, Back)	Silver
Construction	Glass, SECC
Product Dimensions (W x H x D mm)	185 x 130.52 x 41.6
Net Weight (kg)	0.86
Gross Weight (kg)	2.15
Packing Dimensions (W x H x D mm)	285 x 200 x 210 (2 units)
VESA Mount (mm)	None
Impact Resistance (Front, Center)	IK07
Ingress Protection (Front)	None
Environment & Certifications	
Certifications	CCC
Operating Temp/Humidity	-20°C ~ 60°C, 20% ~ 80% RH (Non-condensing)
Storage Temp/Humidity	-30°C ~ 80°C, 10% ~ 90% RH (Non-condensing)
Accessories	
Remote Key	None
Cables	1 x USB A to A
Power Cord	None
Power Adapter	None
Bezel Brackets	None
Desktop Stand	None

*Please verify specifications before quoting. The guide is intended for reference purpose only. All product specifications and information are subject to change without notices.

TSF





Model Name	TSF-150 TSF-150B1062P110XX	TSF-170 TSF-170B1062P110xx
Touch & Display Parameters		
Screen Size	15" TFT LCD	17" TFT LCD
Max Resolution	1024 x 768	1280 x 1024
Contrast Ratio (Typ.)	2500: 1	1000: 1
Display Brightness (Typ., cd/m^2)	305 (LCD), 260 (PCAP)	300 (LCD), 255 (PCAP)
Viewing Angle (CR>10, Typ., L/R/U/D, °)	88 / 88 / 88 / 88	85 / 85 / 80 / 80
Cover Glass Surface Hardness	7H	7H
Touch Screen	PCAP	PCAP
Number of Simultaneous Touch (es)	10 Pts	10 Pts
Touch Interface	USB-B	USB-B
OSD Touch	Yes	Yes
Hover Touch	2 Pts	2 Pts
Surface Treatment	None	AF
I/O Ports		
USB Port	1 x USB-B	1 x USB-B
Video Port	1 x VGA, 1 x HDMI, 1 x DP	1 x VGA, 1 x HDMI, 1 x DP
Built-in Speaker	None	None
Audio Port	None	None
Power Input	DC 12V, 2.1mm Jack	DC 12V, 2.1mm Jack
Power Supply	External, 12V 60W	External, 12V 60W
Other Interfaces	1 x RJ11 (for Remote Key)	1 x RJ11 (for Remote Key)
Mechanical Parameters		
Housing Color (Front, Back)	Black, Black	Black, Black
Construction	Glass, ABS, SECC	Glass, ABS, SECC
Product Dimensions (W x H x D mm)	337.4 x 265.4 x 43.8	369 x 307 x 47.3
Net Weight (kg)	2.7	3.6
Gross Weight (kg)	4	5.2
Packing Dimensions (W x H x D mm)	435 x 355 x 165	455 x 145 x 387
VESA Mount (mm)	100 x 100	100 x 100
Impact Resistance (Front, Center)	IK08	IK08
Ingress Protection (Front)	IP65	IP65
Environment & Certifications		
Certifications	CE, CB, FCC, UL/cUL, CCC, UKCA	CE, CB, FCC, UL/cUL, CCC, UKCA
Operating Temp/Humidity	0°C ~ 40°C, 20% ~ 90% RH (Non-condensing)	0°C ~ 40°C, 20% ~ 90% RH (Non-condensing)
Storage Temp/Humidity	-20°C ~ 60°C, 10% ~ 90% RH (Non-condensing)	-20°C ~ 60°C, 10% ~ 90% RH (Non-condensing)
Accessories		
Remote Key	None	Yes
Cables	1 x USB A to B, 1 x VGA, 1 x HDMI, 1 x DP	1 x USB A to B, 1 x VGA, 1 x HDMI, 1 x DP
Power Cord	1 x US	1 x UK, 1 x EU
Power Adapter	Yes	Yes
Bezel Brackets	None	None
Desktop Stand	None	None





Model Name	TSF-190 TSF-190B1061P110xx	TSF-190HB TSF-190B1062P110xx
Touch & Display Parameters		
Screen Size	19" TFT LCD	19" TFT LCD
Max Resolution	1280 x 1024	1280 x 1024
Contrast Ratio (Typ.)	1000: 1	1000: 1
Display Brightness (Typ., cd/m^2)	215 (LCD), 170 (PCAP)	340 (LCD), 300 (PCAP)
Viewing Angle (CR>10, Typ., L/R/U/D, °)	89 / 89 / 89 / 89	89 / 89 / 89 / 89
Cover Glass Surface Hardness	7H	7H
Touch Screen	PCAP	PCAP
Number of Simultaneous Touch (es)	10 Pts	10 Pts
Touch Interface	USB-B	USB-B
OSD Touch	Yes	Yes
Hover Touch	2 Pts	2 Pts
Surface Treatment	None	None
I/O Ports		
USB Port	1 x USB-B	1 x USB-B
Video Port	1 x VGA, 1 x HDMI, 1 x DP	1 x VGA, 1 x HDMI, 1 x DP
Built-in Speaker	None	None
Audio Port	None	None
Power Input	DC 12V, 2.1mm Jack	DC 12V, 2.1mm Jack
Power Supply	External, 12V 60W	External, 12V 60W
Other Interfaces	1 x RJ11 (for Remote Key)	1 x RJ11 (for Remote Key)
Mechanical Parameters		
Housing Color (Front, Back)	Black, Black	Black, Black
Construction	Glass, ABS, SECC	Glass, ABS, SECC
Product Dimensions (W x H x D mm)	416 x 344 x 46.6	416 x 344 x 46.6
Net Weight (kg)	4.4	4.4
Gross Weight (kg)	6.3	6.3
Packing Dimensions (W x H x D mm)	500 x 145 x 425	500 x 145 x 425
VESA Mount (mm)	100 x 100	100 x 100
Impact Resistance (Front, Center)	IK08	IK08
Ingress Protection (Front)	IP65	IP65
Environment & Certifications		
Certifications	CE, CB, FCC, UL/cUL, CCC, UKCA	CE, CB, UL/cUL, UKCA, FCC
Operating Temp/Humidity	0°C ~ 40°C, 20% ~ 90% RH (Non-condensing)	0°C ~ 40°C, 20% ~ 90% RH (Non-condensing)
Storage Temp/Humidity	-20°C ~ 60°C, 10% ~ 90% RH (Non-condensing)	-20°C ~ 60°C, 10% ~ 90% RH (Non-condensing)
Accessories		
Remote Key	Yes	Yes
Cables	1 x USB A to B, 1 x VGA, 1 x HDMI, 1 x DP	1 x USB A to B, 1 x VGA, 1 x HDMI, 1 x DP
Power Cord	1 x US	1 x US
Power Adapter	Yes	Yes
Bezel Brackets	None	None
Desktop Stand	None	None

*Please verify specifications before quoting. The guide is intended for reference purpose only. All product specifications and information are subject to change without notices.

TSM





Model Name	TSM-150 TSM-150B1062P11001	TSM-170 TSM-170B1062S11001
Touch & Display Parameters		
Screen Size	15" TFT LCD	17" TFT LCD
Max Resolution	1024 x 768	1280 x 1024
Contrast Ratio (Typ.)	2500: 1	1000: 1
Display Brightness (Typ., cd/m^2)	305 (LCD), 260 (PCAP)	300 (LCD), 255 (PCAP)
Viewing Angle (CR>10, Typ., L/R/U/D, °)	88 / 88 / 88 / 88	85 / 85 / 80 / 80
Cover Glass Surface Hardness	7H	7H
Touch Screen	PCAP	PCAP
Number of Simultaneous Touch (es)	10 Pts	10 Pts
Touch Interface	USB-B	USB-B
OSD Touch	Yes	Yes
Hover Touch	2 Pts	2 Pts
Surface Treatment	None	AF
I/O Ports		
USB Port	1 x USB-B	1 x USB-B
Video Port	1 x VGA, 1 x HDMI, 1 x DP	1 x VGA, 1 x HDMI, 1 x DP
Built-in Speaker	None	None
Audio Port	None	None
Power Input	DC 12V, 2.1mm Jack	DC 12V, 2.1mm Jack
Power Supply	External, 12V 60W	External, 12V 60W
Other Interfaces	1 x RJ11 (for Remote Key)	1 x RJ11 (for Remote Key)
Mechanical Parameters		
Housing Color (Front, Back)	Black, Black	Black, Black
Construction	Glass, ABS, SECC	Glass, ABS, SECC
Product Dimensions (W x H x D mm)	337.4 x 304.2 x 202	369 x 334.9 x 202
Net Weight (kg)	4.4	5.3
Gross Weight (kg)	6	7.3
Packing Dimensions (W x H x D mm)	415 x 370 x 290	450 x 277 x 418
VESA Mount (mm)	100 x 100	100 x 100
Impact Resistance (Front, Center)	IK08	IK08
Ingress Protection (Front)	IP65	IP65
Environment & Certifications		
Certifications	CE, CB, FCC, UL/cUL, CCC, UKCA	CE, CB, FCC, UL/cUL, CCC, UKCA
Operating Temp/Humidity	0°C ~ 40°C, 20% ~ 90% RH (Non-condensing)	0°C ~ 40°C, 20% ~ 90% RH (Non-condensing)
Storage Temp/Humidity	-20°C ~ 60°C, 10% ~ 90% RH (Non-condensing)	-20°C ~ 60°C, 10% ~ 90% RH (Non-condensing)
Accessories		
Remote Key	None	Yes
Cables	1 x USB A to B, 1 x VGA, 1 x HDMI, 1 x DP	1 x USB A to B, 1 x VGA, 1 x HDMI, 1 x DP
Power Cord	1 x US	1x UK, 1x EU
Power Adapter	Yes	Yes
Bezel Brackets	None	None
Desktop Stand	Yes	Yes





Model Name	TSM-190 TSM-190B1061P11001	TSM-190HB TSM-190B1062P11001
Touch & Display Parameters		
Screen Size	19" TFT LCD	19" TFT LCD
Max Resolution	1280 x 1024	1280 x 1024
Contrast Ratio (Typ.)	1000: 1	1000: 1
Display Brightness (Typ., cd/m^2)	215 (LCD), 170 (PCAP)	340 (LCD), 300 (PCAP)
Viewing Angle (CR>10, Typ., L/R/U/D, °)	89 / 89 / 89 / 89	89 / 89 / 89 / 89
Cover Glass Surface Hardness	7H	7H
Touch Screen	PCAP	PCAP
Number of Simultaneous Touch (es)	10 Pts	10 Pts
Touch Interface	USB-B	USB-B
OSD Touch	Yes	Yes
Hover Touch	2 Pts	2 Pts
Surface Treatment	None	None
I/O Ports		
USB Port	1 x USB-B	1 x USB-B
Video Port	1 x VGA, 1 x HDMI, 1 x DP	1 x VGA, 1 x HDMI, 1 x DP
Built-in Speaker	None	None
Audio Port	None	None
Power Input	DC 12V, 2.1mm Jack	DC 12V, 2.1mm Jack
Power Supply	External, 12V 60W	External, 12V 60W
Other Interfaces	1 x RJ11 (for Remote Key)	1 x RJ11 (for Remote Key)
Mechanical Parameters		
Housing Color (Front, Back)	Black, Black	Black, Black
Construction	Glass, ABS, SECC	Glass, ABS, SECC
Product Dimensions (W x H x D mm)	416 x 379.6x 219	416 x 379.6x 219
Net Weight (kg)	6.5	6.5
Gross Weight (kg)	8.3	8.3
Packing Dimensions (W x H x D mm)	500 x 295 x 460	500 x 295 x 460
VESA Mount (mm)	100 x 100	100 x 100
Impact Resistance (Front, Center)	IK08	IK08
Ingress Protection (Front)	IP65	IP65
Environment & Certifications		
Certifications	CE, CB, FCC, UL/cUL, CCC, UKCA	CE, CB, FCC, UL/cUL, CCC, UKCA
Operating Temp/Humidity	0°C ~ 40°C, 20% ~ 90% RH (Non-condensing)	0°C ~ 40°C, 20% ~ 90% RH (Non-condensing)
Storage Temp/Humidity	-20°C ~ 60°C, 10% ~ 90% RH (Non-condensing)	-20°C ~ 60°C, 10% ~ 90% RH (Non-condensing)
Accessories		
Remote Key	Yes	Yes
Cables	1 x USB A to B, 1 x VGA, 1 x HDMI, 1 x DP	1 x USB A to B, 1 x VGA, 1 x HDMI, 1 x DP
Power Cord	1 x US	1 x US
Power Adapter	Yes	Yes
Bezel Brackets	None	None
Desktop Stand	Yes	Yes

*Please verify specifications before quoting. The guide is intended for reference purpose only. All product specifications and information are subject to change without notices.

IEC





Model Name	IEC-151J100 IEC-151J1003P1xxxx	IEC-151N702 IEC-151N7023P1xxxx
Hardware Configuration		
CPU	Intel® Celeron® Processor J6412 (2.0 GHz, 1.5M Cache), TPD: 10W	MediaTek MT8390, Dual-core Cortex-A78 up to 2.2GHz Six-core Cortex-A55 up to 2.0GHz
GPU	Intel® UHD Graphics for 10th Gen Intel® Processors	Mali-G57 MC3
RAM	4GB, single So-dimm	8GB dual channel LPDDR4X
Storage	1 x M.2 SATA SSD	64GB eMMC
Touch & Display Parameters		
Screen Size	15.6" TFT LCD	15.6" TFT LCD
Max Resolution	1920 x 1080	1920 x 1080
Contrast Ratio (Typ.)	700:1	700:1
Display Brightness (Typ., cd/m^2)	385 (LCD), 305 (PCAP)	385 (LCD), 305 (PCAP)
Viewing Angle (CR>10, Typ., L/R/U/D, °)	89 / 89 / 89 / 89	89 / 89 / 89 / 89
Cover Glass Surface Hardness	7H	7H
Touch Screen	PCAP	PCAP
Number of Simultaneous Touch (es)	10 Pts	10 Pts
Touch Interface	USB-C	USB-C
OSD Touch	Yes	Yes
Hover Touch	Yes	Yes
Surface Treatment	AG	None
I/O Ports		
USB Port	2 x USB-A 3.0; 2 x USB-A 2.0; 2 x USB-C 3.0; 1 x USB-C 3.0, Support USB3.0 HOST, 4 Lane DP-alt mode up to 4K@60Hz, PD out 5V@0.9A(Default) & 3A by BIOS select	2 x USB-A 3.0; 1 x USB-C 3.0; 1 x USB-C 2.0; 1 x USB-C 3.0, 4lane DP-alt mode up to 4K@60Hz, PD 5V/12V@3A output
Built-in Speaker	2 x 2W	2 x 2W
Audio Port	1 x Line-out, TRS Jack 1 x 3.5mm Audio Line-out Jack	1 x 3.5mm Audio Line-out Jack
LAN Port	1 x LAN RJ45 (Support 10/100/1000Mbps)	1 x LAN (Support 10/100/1000Mbps, 802.3at POE 25W)
PoE Port (Optional)	None	Yes
COM Port (Optional)	1 x COM1 DB9 male, RI(Default) / 5V / 12V by BIOS select 1 x COM2 RJ50, 5V / 12V(Default) by Jumper	None
TF Slot	None	1 x TF slot (Support SDHC 3.0)
Nano Slot	None	1 x Nano SIM slot
Power Input	DC 12V, 2.1mm Jack	DC 12V, 2.1mm Jack
Power Supply	External, 12V 90W or 12V 120W	External, 12V 60W
Communications & OS		
LTE	None	Optional
WiFi	Optional	WiFi 6
Bluetooth	Optional	Bluetooth 5.2
OS	Windows 7 / 8 / 10 / 11, Android, Linux base OS 3.0.8 and later	Windows 7 / 8 / 10 / 11, Android, Linux base OS 3.0.8 and later
Mechanical Parameters		
Housing Color (Front, Back)	Black	Black
Construction	Glass, ABS, Diecasting	Glass, ABS, Diecasting
Product Dimensions (W x H x D mm)	223.7 x 369.0 x 35.2	223.7 x 369.0 x 35.2
Net Weight (kg)	2.01	2.01
Gross Weight (kg)	3.01	3.01
Packing Dimensions (W x H x D mm)	443 x 293 x 180	443 x 293 x 180
VESA Mount (mm)	100 x 100	100 x 100
Impact Resistance (Front, Center)	IK07	IK07
Ingress Protection (Front)	IP65	IP65
Environment & Certifications		
Certifications	CE, CB, UL/cUL, UKCA, FCC	CE, CB, UL/cUL, UKCA, FCC
Operating Temp/Humidity	0°C ~ 40°C, 20% ~ 80% RH (Non-condensing)	0°C ~ 40°C, 20% ~ 80% RH (Non-condensing)
Storage Temp/Humidity	-20°C ~ 60°C, 10% ~ 90% RH (Non-condensing)	-20°C ~ 60°C, 10% ~ 90% RH (Non-condensing)
Accessories		
Remote Key	Optional	Optional
Cables	None	None
Power Cord	1 x Optional	1 x Optional
Power Adapter	External	External
Desktop Stand	Optional	Optional





Model Name	IEC-220J100 IEC-220J1001P1xxxx	IEC-220N702 IEC-220N7021P11xxxx
Hardware Configuration		
CPU	Intel® Celeron® Processor J6412 (2.0 GHz, 1.5M Cache), TPD: 10W	MediaTek MT8390, Dual-core Cortex-A78 up to 2.2GHz Six-core Cortex-A55 up to 2.0GHz
GPU	Intel® UHD Graphics for 10th Gen Intel® Processors	Mali-G57 MC3
RAM	4GB, single So-dimm	8GB dual channel LPDDR4X
Storage	1 x M.2 SATA SSD	64GB eMMC
Touch & Display Parameters		
Screen Size	21.5" TFT LCD	21.5" TFT LCD
Max Resolution	1920 x 1080	1920 x 1080
Contrast Ratio (Typ.)	1000:1	1000:1
Display Brightness (Typ., cd/m^2)	215 (LCD), 170 (PCAP)	250 (LCD),212.5 (PCAP)
Viewing Angle (CR>10, Typ., L/R/U/D, °)	89 / 89 / 89 / 89	89 / 89 / 89 / 89
Cover Glass Surface Hardness	7H	7H
Touch Screen	PCAP	PCAP
Number of Simultaneous Touch (es)	10 Pts	10 Pts
Touch Interface	USB-C	USB
OSD Touch	Yes	Yes
Hover Touch	Yes	Yes
Surface Treatment	AG	None
I/O Ports		
USB Port	2 x USB-A 3.0; 2 x USB-A 2.0; 2 x USB-C 3.0; 1 x USB-C 3.0, Support USB3.0 HOST, 4 Lane DP-alt mode up to 4K@60Hz, PD out 5V@0.9A(Default) & 3A by BIOS select	2 x USB-A 3.0, 1 x USB-C 3.0, 1 x USB-C 2.0, 1 x USB-C
Built-in Speaker	2 x 2W	2 x 2W
Audio Port	1 x Line-out, TRS Jack 1 x 3.5mm Audio Line-out Jack	1 x 3.5mm Audio Line-out Jack
LAN Port	1 x LAN RJ45 (Support 10/100/1000Mbps)	1 x LAN (Support 10/100/1000Mbps, 802.3at POE 25W)
PoE Port (Optional)	None	Yes
COM Port (Optional)	1 x COM1 DB9 male, RI(Default) / 5V / 12V by BIOS select 1 x COM2 RJ50, 5V / 12V(Default) by Jumper	None
TF Slot	None	1 x TF slot (Support SDHC 3.0)
Nano Slot	None	1 x Nano SIM slot
Power Input	DC 12V, 2.1mm Jack	DC 12V, 2.1mm Jack
Power Supply	External, 12V 90W or 12V 120W	External, 12V 90W
Communications & OS		
LTE	None	Optional
WiFi	Optional	WiFi 6
Bluetooth	Optional	Bluetooth 5.2
OS	Windows 7 / 8 / 10 / 11, Linux/Android 2.6.32 or Later	Android 13 with GMS(EDLA)
Mechanical Parameters		
Housing Color (Front, Back)	Black	Black
Construction	Glass, ABS, Diecasting	Glass, ABS, Diecasting
Product Dimensions (W x H x D mm)	308 x 511 x 45.9	308 x 511 x 45.9
Net Weight (kg)	4.2	4.2
Gross Weight (kg)	6.6	6.6
Packing Dimensions (W x H x D mm)	582 x 372 x 195	610 x 405 x 160
VESA Mount (mm)	100 x 100	100 x 100
Impact Resistance (Front, Center)	IK07	IK07
Ingress Protection (Front)	IP65	IP65
Environment & Certifications		
Certifications	CE, CB, UL/cUL, UKCA, FCC	CE, CB, UL/cUL, UKCA, FCC
Operating Temp/Humidity	0°C ~ 40°C, 20% ~ 80% RH (Non-condensing)	0°C ~ 40°C, 20% ~ 80% RH (Non-condensing)
Storage Temp/Humidity	-20°C ~ 60°C, 10% ~ 90% RH (Non-condensing)	-20°C ~ 60°C, 10% ~ 90% RH (Non-condensing)
Accessories		
Remote Key	Optional	Optional
Cables	None	None
Power Cord	1 x Optional	1 x Optional
Power Adapter	External	External
Desktop Stand	Optional	Optional

*Please verify specifications before quoting. The guide is intended for reference purpose only. All product specifications and information are subject to change without notices.

TBX





Model Name	TBX-100J100 TBX-100J100001XXXX	TBX-100N702 TBX-100N702001XXXX
Touch & Display Parameters		
CPU	Intel Celeron® Processor J6412 (2.0 GHz, 1.5M Cache, 10W TDP)	MediaTek MT8390, Dual-core Cortex-A78 up to 2.2GHz Six-core Cortex-A55 up to 2.0GHz
GPU	Intel® UHD Graphics for 10th Gen Intel® Processors	Mali-G57 MC3
NPU		
RAM	1 x 8GB DDR4-3200 (Max 32GB supported)	8GB dual channel LPDDR4X
Storage	1 x 128GB M.2 SATA SSD	64GB eMMC
I/O Ports		
Video Port	1 x HDMI 1 x DP-alt mode up to 4K@60Hz, PD out 5V@0.9A	1 x HDMI 1 x DP-alt mode up to 4K@60Hz, PD out 5V/12V@3A
USB Port	2 x USB-C 3.0 2 x USB-A 3.0 2 x USB-A 2.0	1 x USB-C 3.0 (5V@2A out) 1 x USB-C 2.0 (Support OTG, 5V@2A out) 2 x USB-A 3.0
Built-in Speaker	None	None
Audio Port	1 x 3.5mm Audio Line-out Jack	1 x 3.5mm Audio Line-out Jack
LAN Port (10/100/100Mbps)	1 x RJ45	1 x RJ45
PoE Port (Optional)	None	802.3at POE 25W
COM Port (Optional)	1 x RJ50, 5V/12V (Default) by Jumper 1 x DB-9/M, RI (Default) /5V/12V by BIOS select	None
TF Slot	None	1 x Support SDHC 3.0
Nano Slot	None	Optional
Power Input	AC 100~240V, 50/60Hz, 2.5mm Jack	AC 100~240V, 50/60Hz, 2.5mm Jack
Power Supply	Built-in, 12V 60W or 12V 90W (Optional)	Built-in, 12V 60W
Other Interfaces	None	None
Communications & OS		
LTE	None	Optional
WiFi	Optional	WiFi 6
Bluetooth	Optional	Bluetooth 5.2
OS	Windows 10, Windows 11, Linux	4G: Android13 without GMS No 4G: Android 13 with GMS (EDLA)
Mechanical Parameters		
Housing Color (Front, Back)	Black	Black
Construction	Die-casting, SECC	Die-casting, SECC
Product Dimensions (W x H x D mm)	146 x 161 x 32.8	146 x 161 x 32.8
Net Weight (kg)	0.78	0.8
Gross Weight (kg)	2.25	2.45
Packing Dimensions (W x H x D mm)	250 x 290 x 160	250 x 290 x 160
VESA Mount (mm)	100 x 100	100 x 100
Impact Resistance (Front, Center)	None	None
Ingress Protection (Front)	None	None
Environment & Certifications		
Certifications	CE, CB, UL/cUL, UKCA, FCC	CE, CB, UL/cUL, UKCA, FCC
Operating Temp/Humidity	0°C ~ 40°C, 20% ~ 90% RH (Non-condensing)	0°C ~ 40°C, 20% ~ 90% RH (Non-condensing)
Storage Temp/Humidity	-20°C ~ 60°C, 10% ~ 90% RH (Non-condensing)	-20°C ~ 60°C, 10% ~ 90% RH (Non-condensing)
Accessories		
Remote Key	None	None
Cables	None	None
Power Cord	1 x Optional	1 x Optional
Power Adapter	Built-in	Built-in
Bezel Brackets	None	Yes
Desktop Stand	None	None



Model Name	TBX-200 TBX-200P70000BI801
Touch & Display Parameters	
CPU	MediaTek MT8371, Dual-core Cortex-A78 up to 2.2GHz Six-core Cortex-A55 up to 2.0GHz
GPU	Arm Mali-G57 MC2 up to 1.1GHz
NPU	MediaTek NPU 850, 10 TOPS
RAM	8GB dual channel LPDDR5X
Storage	64GB UFS 3.1
I/O Ports	
Video Port	1 x HDMI (4K60), w/o audio 1 x USB-C 3.0 (PD 5V/12V/3A, 4-lane DP alt-mode up to 4K60 w/ audio, support USB 2.0 OTG)
USB Port	2 x USB-A 3.0 2 x USB-A 2.0
Built-in Speaker	None
Audio Port	1 x 3.5mm Audio Line-out Jack
LAN Port (10/100/100Mbps)	1 x RJ-45 LAN (10/100/1000 Mbps, 802.3at PoE 25W) 1 x USB LAN (Built-in USB-to-Gigabit Ethernet 10/100/1000 Mbps)
PoE Port (Optional)	1 x POE 48V/55V
COM Port (Optional)	1 x DB-9 (Standard) 1 X RJ11,support GPIO (Standard)
TF Slot	None
Nano Slot	None
Power Input	DC 12V or PoE 48V/55V (Type-C power to display is not supported under PoE mode)
Power Supply	12V/5A, 60W power adapter
Other Interfaces	None
Communications & OS	
LTE	None
WiFi	Wi-Fi 6E (802.11 a/b/g/n/ac/ax) 2T2R
Bluetooth	Bluetooth 5.2 BLE, 1T1R
OS	Android 15, GMS certified (EDLA)
Mechanical Parameters	
Housing Color (Front, Back)	Black
Construction	Die-casting
Product Dimensions (W x H x D mm)	119 x 130 x 28
Net Weight (kg)	0.52
Gross Weight (kg)	1.06
Packing Dimensions (W x H x D mm)	180 x 205 x 130
VESA Mount (mm)	75 x 75, 100 x 100
Impact Resistance (Front, Center)	None
Ingress Protection (Front)	None
Environment & Certifications	
Certifications	CB, CCC, UKCA, CE, FCC
Wireless Certifications	CE RED, SRRC, FCC ID/IC ID, TELEC
Operating Temp/Humidity	-10°C ~ 60°C, 20% ~ 80% RH (Non-condensing)
Storage Temp/Humidity	-20°C ~ 70°C, 10% ~ 90% RH (Non-condensing)
Accessories	
Remote Key	None
Cables	1 x USB-C (Optional), 1 x HDMI (Optional), 1 x Wi-Fi Antenna, 1 x Wi-Fi /BT Antenna
Power Cord	1
Power Adapter	Yes
Bezel Brackets	None
Desktop Stand	None

* Please verify specifications before quoting. The guide is intended for reference purpose only.
All product specifications and information are subject to change without notices.

TPMF







Model Name	TPMF-151 TPMF151B2012P1I801	TPMF-193 TPMF-193-PUF-BK-10R	TPMF-221 TPMF-22110P21001
Touch & Display Parameters			
Screen Size	15.6" TFT LCD	19" TFT LCD	21.5" TFT LCD
Max Resolution	1920 x 1080	1280 x 1024	1920 x 1080
Contrast Ratio (Typ.)	700: 1	1000: 1	3000: 1
Display Brightness (Typ., cd/m²)	350 (LCD), 300 (PCAP)	250 (LCD), 200 (PCAP)	250 (LCD), 200 (PCAP)
Viewing Angle (CR>10, Typ., L/R/U/D, °)	85 / 85 / 85 / 85	85 / 85 / 85 / 85	89 / 89 / 89 / 89
Cover Glass Surface Hardness	7H	7H	7H
Touch Screen	PCAP	PCAP	PCAP
Number of Simultaneous Touch (es)	10 Pts	10 Pts	10 Pts
Touch Interface	USB-B	USB-B	USB-B
OSD Touch	None	None	None
Hover Touch	None	None	None
Surface Treatment	None	None	None
I/O Ports			
USB Port	1 x USB-B	1 x USB-B	1 x USB-B
Video Port	1 x VGA, 1 x HDMI, 1 x DP	1 x VGA, 1 x DVI	1 x VGA, 1 x HDMI
Built-in Speaker	None	None	None
Audio Port	None	None	None
Power Input	DC 12V, 2.1mm Jack	DC 12V, 2.1mm Jack	DC 12V, 2.1mm Jack
Power Supply	External, 12V 36W	External, 12V 36W	External, 12V 36W
Other Interfaces	None	None	None
Mechanical Parameters			
Housing Color (Front, Back)	Black	Black	Black
Construction	Glass, ABS, SECC	Glass, ABS, SECC	Glass, ABS, SECC
Product Dimensions (W x H x D mm)	381.89 x 234.29 x 38.2	432.8 x 360.2 x 55.5	520.8 x 312.3 x 52.9
Net Weight (kg)	2.75	5.3	5.6
Gross Weight (kg)	3.5	12.6 (2 units)	7.05
Packing Dimensions (W x H x D mm)	470 x 343 x 145	460 x 245 x 540 (2 units)	615 x 405 x 160
VESA Mount (mm)	75 x 75	75 x 75, 100 x 100	75 x 75, 100 x 100
Impact Resistance (Front, Center)	IK08	IK08	IK08
Ingress Protection (Front)	None	None	None
Environment & Certifications			
Certifications	CCC, CE	CCC	CCC, CE
Operating Temp/Humidity	0°C ~ 50°C, 20% ~ 80% RH (Non-condensing)	0°C ~ 50°C, 20% ~ 80% RH (Non-condensing)	0°C ~ 50°C, 20% ~ 80% RH (Non-condensing)
Storage Temp/Humidity	-20°C ~ 60°C, 10% ~ 90% RH (Non-condensing)	-20°C ~ 60°C, 10% ~ 90% RH (Non-condensing)	-20°C ~ 60°C, 10% ~ 90% RH (Non-condensing)
Accessories			
Remote Key	None	None	None
Cables	1 x USB A to B, 1 x VGA, 1 x HDMI, 1 x DP	1 x USB A to B, 1 x VGA	1 x USB A to B, 1 x VGA
Power Cord	1 x CN	1 x CN	1 x CN
Power Adapter	None	None	None
Bezel Brackets	None	None	None
Desktop Stand	None	None	None

*Please verify specifications before quoting. The guide is intended for reference purpose only. All product specifications and information are subject to change without notices.



About TES

TES Touch Embedded Solutions Inc.

19F, No. 55, Lane 47, Sec. 3, Nangang Rd. , Nangang District, Taipei City, 115
+886-2-6615-3899
contact@tes-tec.com
www.tes-tec.com

Worldwide Branch Office Location

America

USA I Michigan

215 Central Ave., Holland, MI 49423
+1-616-786-5350
SalesAmerica@tes-tec.com

Europe

Germany I Nettetal

TES Germany Gmbh
Biether Str.5 41334, Nettetal, Germany
+49 2153 9704860
SalesEurope@tes-tec.com

Asia

China I Xiamen

No.60, South Xinglin Rd., Jimei District, Xiamen, Fujian 361022
+86-592-6681616
SalesChina@tes-tec.com

China I Shanghai

Room 805, Building C1, No. 1599, Xinjinqiao Road, Pudong New Area, Shanghai
4001002265
SalesChina@tes-tec.com

China I Shenzhen

Room 2101i, Office Building A, Fufang Science And Technology Building, No. 4008, Xinhu Road, Xixiang street, Bao'an District, Shenzhen
4001002265
SalesChina@tes-tec.com

Thailand I Chon Buri

88 That Thong, Bo Thong District, Chon Buri
contact@tes-tec.com

Thailand I Rayong

WHA Rayong Industrial Park, Rayong Province
Contact@tes-tec.com

South Korea I Seoul

B-718, Queenspark 11, 212, Gonghang-daero, Gangseo-gu, Seoul, 07806, Republic of Korea
+82-070-7835-8261
Contact@tes-tec.com

©2026 TES Touch Embedded Solutions Inc.
All Rights Reserved

Please verify specifications before quoting. This guide is intended for reference purpose only.
All product specifications and information are subject to change without notice.
No part of this publication may be reproduced in any form or by any means without prior written permission of the publisher.
All brand and product names are registered trademarks of their respective companies.

TES Website

Linked In

VR Demoroom