POINT Mobile

PM451 FOR COLD CHAIN

Conquering Freezing Territories
with Advanced Data Capture Technology

PDT for Cold Chain Management

Unlock Safe and Efficient Operations in Freezing Conditions

The cold chain logistics industry demands specialized equipment capable of thriving in the harshest environments, from freezers to refrigerators or other cooling facilities. The new specialized PM451 for cold chain is engineered for uninterrupted and high-performance operation even at temperatures as low as -30 °C/-22 °F. With the new cold chain model, harness the power of a robust, smart device with an advanced scan engine and processor, even inside the freezer.

Reliable Low-Temperature Battery Pack

The cutting-edge low-temperature battery pack ensures your lithium-ion battery remains fully operational at typical freezer temperatures. Rigorously tested, with more than 10 hours of continuous scanning in freezer condition, the PM451's cold chain battery pack promises peak performance.

Condensation-Free, Vacuum-Sealed Scan Window

Freezers poses a significant risk to electronic devices due to condensation. The PM451 cold chain model eliminates this concern with its innovative vacuum-sealed scan window. This safeguard protects the scan engine from potential damage and ensures optimal performance by preventing moisture-induced obstructions and degradation. Additionally, the display has been rigorously tested to function flawlessly in temperatures as low as -30 °C/-22 °F

Low temperature pack

Vacuum glass

OCTA CORE 2.2 GHZ	RAM/ROM 4 GB/64 GB	ANDROID 9 OR 11	4.3" WVGA 480x800 GORILLA GLASS
NFC	1D/2D	IP65 2 m (6.5 ft.)	PULS SERVICE
Opearting temp. -30 °C to 60 °C	4G LTE WIFI	FAST ROAMING	BLUETOOTH CLASS I VER. 5 BLE
EMKIT SUPPORT	5,700 mAh	13MP WITH FLASH	3 KEYPAD OPTIONS

PM451

PERFORMANCE CHARACTERISTICS

Main-Processor
2.2 GHz Octa Core

Operating System

Google Android (GMS certified)	Android 9 or 11 (upgradeable to Android 14) FOTA (Firmware Over The Air) update

Memory and Storage

RAM	4 GB
ROM (NAND Flash)	6 4GB
SIM	1 micro SIM slot

Sensor
Proximity sensor, Light Ambient sensor, Accelerometer

PHYSICAL CHARACTERISTICS

Dimensions	214.94 mm x 77.2 6 mm x 39.25 mm 8.46 in. x 3.04 in. x 1.55 in.
Weight	450 g/15.87 oz.
Display	4.3", IPS panel (480 x 800 pixel) WVGA LED backlight Daylight readable (min 500 nits) Wideviewing angle Multi-touch capacitive Corning Gorilla glass
Power	
Battery	5,700 mAh Li-ion rechargeable
Back-up Battery	60 mAh (10C) Li-ion rechargeable (Hot-Swap)
Keypad	
3 Keypad options (backlit keys)	Numeric, Function Numeric, Alpha numeric keypad (optional)
Voice and Audio	Built-in microphone and speaker
Standard Communications	USB 2.0 Type C/OTG (supports battery charging PC, USB memory)
Notification	
LED	Power (Charging, Battery Fault) Notification (Message, Scan)
Vibration	

GLOBAL NAVIGATION SATELLITE SYSTEM

WLAN SKU: No GNSS
WWAN SKU : Qualcomm GNSS
GNSS Receiver Support for GPS, GLONASS, Galileo and Beidou

WIRELESS

Wireless WAN

EDGE/GPRS/GSM	900/1800/850/1900
WCDMA	B1/2/4/5/6/8/19
LTE FDD	B1/2/3/4/5/7/8/12/13/ 19/20/25/26/28
LTE TDD	B38/B40/41

Wireless LAN

Radio	IEEE 802.11a/b/g/n/ac/d/h/i/k/r/v, IPv4, IPv6, 2x2 MU-MIMO
Data Rates	5GHz: 802.11a/n/ac: Up to 866.7 Mbps 2.4GHz: 802.11b/g/n: Up to 300 Mbps
Operating Channels	1 to 13 (2412~2472 MHz) 36 to 165 (5180~5825 MHz)
Channel Bandwidth	20, 40, 80 MHz
Security and Encryption	WEP (40 or 104 bit) WPA/WPA2 Personal (TKIP, AES) WPA/WPA2 Enterprise (TKIP/AES) WPA3 Personal (SAE)* WPA3 Enterprise (AES)* WPA3 Enterprise 192-bit mode (GCMP 256)* Enhanced Open (OWE)* PEAP (MSCHAPv2, GTC), TLS, TTLS (PAP, MSCHAP, MSCHAPv2, GTC) PWD, SIM, AKA, AKA', LEAP CCX v4 supported WiFi Direct and Hot spot support
Fast Roam	CCKM, 802.11r

*Supported on Android 11 devices only

Wireless PAN

Bluetooth	Integrated Bluetooth Class I, Ver. 5.0 BLE support

DATA CAPTURE

Integrated scan engine
Supporting 1D/2D barcode symobologies

Camera

Top	13 MP with LED flash

NFC (Near Field Communication)

NFC-Forum (NFC-IP MODES)	Reader For NFC Forum (Tag Types 1 to 5), P2P Active (106 to 424 kbps) Initiator and Target, P2P Passive (106 to 424 kbps) Initiator and Target
Reader (PCD - VCD)	ISO/IEC 14443 A, ISO/IEC 14443 B ISO/IEC 15693, Mifare Classic 1K/4K Mifare DESFire, Mifare UltraLight©, Sony FeliCa

USER ENVIRONMENT

Operating Temperature	-30 °C to 60 °C -22 °F to 140 °F
Storage Temperature	-40 °C to 70 °C -40 °F to 15 °F
Humidity	95% Non-condensing

Drop	Multiple drops from 1.8 m (6 ft.) to concrete over the entire operating temperature range Multiple drops from 2 m (6.5 ft.) per MIL-STD 810G at room temperature
Rain / Dust Proof (Sealing)	IP65
Tumble	1,000 cycle (2,000 hits) at 1 m / 3.3 ft.
Electrostatic Discharge	±15 kV air discharge ±8 kV contact discharge

REGULATORY APPROVALS AND COMPLIANCE

Certified CE, CB, RCM, KC, IC, FCC, IFITEL, NOM, NBTC, CU, FAC, NRCan, DOE, CEC
Environmental: RoHS III & WEEE compliant

ENTERPRISE SOLUTION

PMDM
Simple yet powerful management solution

PMDM is a mobile device management solution for managing and monitoring your Point Mobile Android devices.

Centralized management of enterprise devices is vital for better productivity. You should provide a device configuration that the workers can concentrate on their work with the device, and also decrease the device downtime by predicting when to replace the battery, etc.

EmKit
Enterprise Mobility Kit

The EmKit™ is Point Mobile's value-added service kit engineered for the pure benefit of system integrators. EmKit supports the utilization, solution development, and secure management of your business devices.

PULS - ANDROID UPDATE & SECURITY

PULS is Point Mobile's lifetime solution, which extends the life cycle of Android-based Point Mobile enterprise devices to up to seven years after a product launch.

PULS
Patches, Updates & Lifetime Support

Stay up-to-date with the latest security updates for up to 7 year

Conveniently update your devices in the field by FOTA

Update Android Versions and use new features via PULS*

For further information, please visit www.pointmobile.com or contact your regional sales representative.
*Android version updates may come with restrictions and could incur charges.

WARRANTY

Subject to the Terms and Conditions, PM451 carries 1 (one) year-warranty period from the date of purchase against the defective materials and manufacturing defects.

For the further inquiry, please contact:
service@pointmobile.com