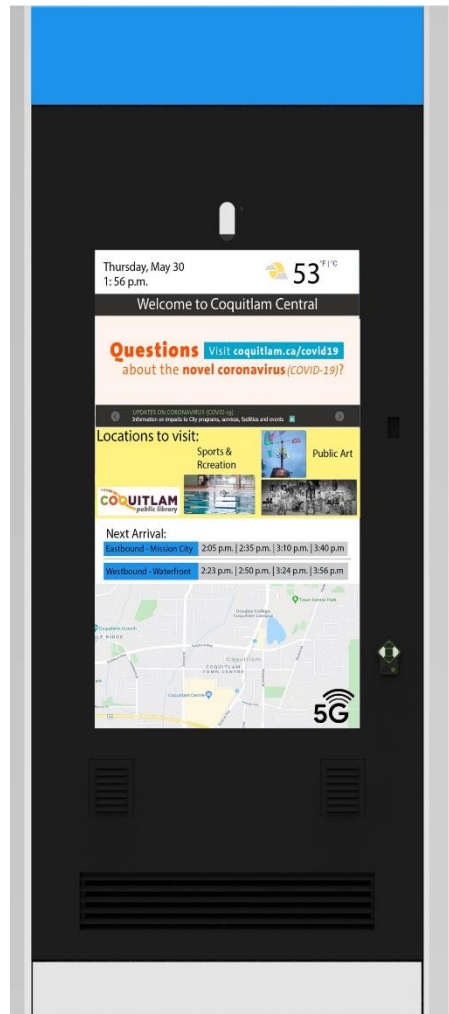




8.5 Ft Smart Cities LCD Interactive Kiosk specification



Model: NISDK-550PCT-505-COQ, Double-Sided

- ✓ Two 55" weatherproof/outdoor interactive LCD Signs
- ✓ Tamper-proof, anti-reflection, tempered glass
- ✓ Compliance: UL48 Outdoor signs and UL879 Sign controller
- ✓ Remote maintenance and system health monitoring
- ✓ LED lighting box: Remote color change from controller
- ✓ Thermal CFM simulation
- ✓ Environmental control: Temperature sensors, IoT sensors



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Design



General Specifications

Parameter	Specification
Video Orientation	Portrait
Active Screen Dimensions	680mm (width) x 1210 mm (depth); (26.8 inches x 47.6 inches)
Overall Enclosure Dimension including Light Box	1128.4 mm (width) x 2605mm (height) x 380mm (depth); (44.4 inches x 102.6 inches x 15 inches)
RF Transparent LED Box Dimension	1044.4mm (width) x 256mm (height) x 295.2mm (depth); (41.1 inches x 10.1 inches x 11.6 inches)
Base plate wiring slot/hole	Accommodates qty. 2, Two inches diameter conduits
Resolution	1080 x 1920 pixels
Color	16.7 million colors (8-bit)
Dimming	50-100% automatic dimming
Calibrated Intensity	2500 Cd/m ²
Color Temperature Modes	Warm / Medium / Cool
Refresh Rate	60 Hz
Contrast Ratio	1400:1
Viewing Angle	178 degrees (side/side) 178 degrees (up/down)
Burn Time (one static image)	30 min
On Screen Display (OSD)	English (default)
Programmable LED Light Box	Default color of all four sides shall be warm white without transition/movement RF Transparent Material

Power, Computers & Electronics

Parameter	Specification	
Power Consumption	1300 W (Average); 1500 W (Maximum)	
Embedded computer	CPU	Intel I7-8650u
	RAM	16GB DDR4
	Storage	512 GB SSD
	OS	Ubuntu 16.04 LTS
Inputs / Outputs	1) HDMI, DVI (720p/1080i/1080p) 2) Video compatible (USB 3.0 or similar) USB cables from Selfie cameras to computers 3) PC input via 15 pin Sub 4) LAN (RJ45, Cat 6), RS-232C 5) Serial cable between top light controller and computer	
Single dedicated receptacle power outlet	20A rated	

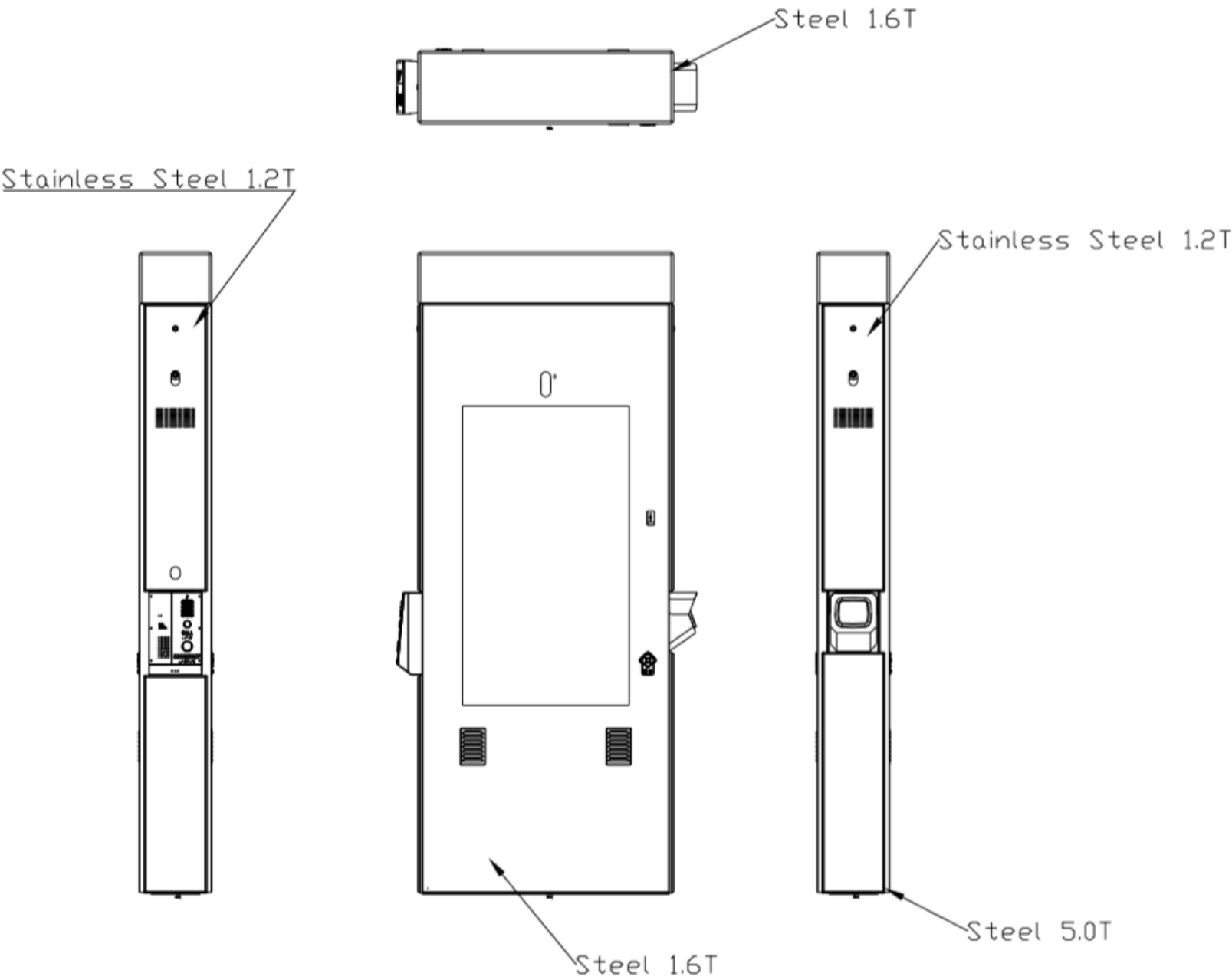
System Level Design & Durability

Parameter	Specification
Rated Operating Conditions	Temperature: -30°C to +45°C Humidity: 20% to 80%
Heating, Ventilation & Air Circulation (HVAC)	Automated system for heating & cooling with active air inflow & exhaust <i>[patent pending]</i>
External Housing Material	Fully-sealed, weather-proof enclosure Powder coated surface treatment
Enclosure sealing / weather proofing	Enclosures shall comply with UL 48 including outdoor rain test
Touch Screen Glass	Anti-glare, 1% max haze, anti-vandal, tempered glass.
Certification	FCC, UL Standards48, UL879 Sign Controller
Warranty	36 Months, Depot parts and labor
Mean Time Between Failure	50,000 hours

Detailed Specifications

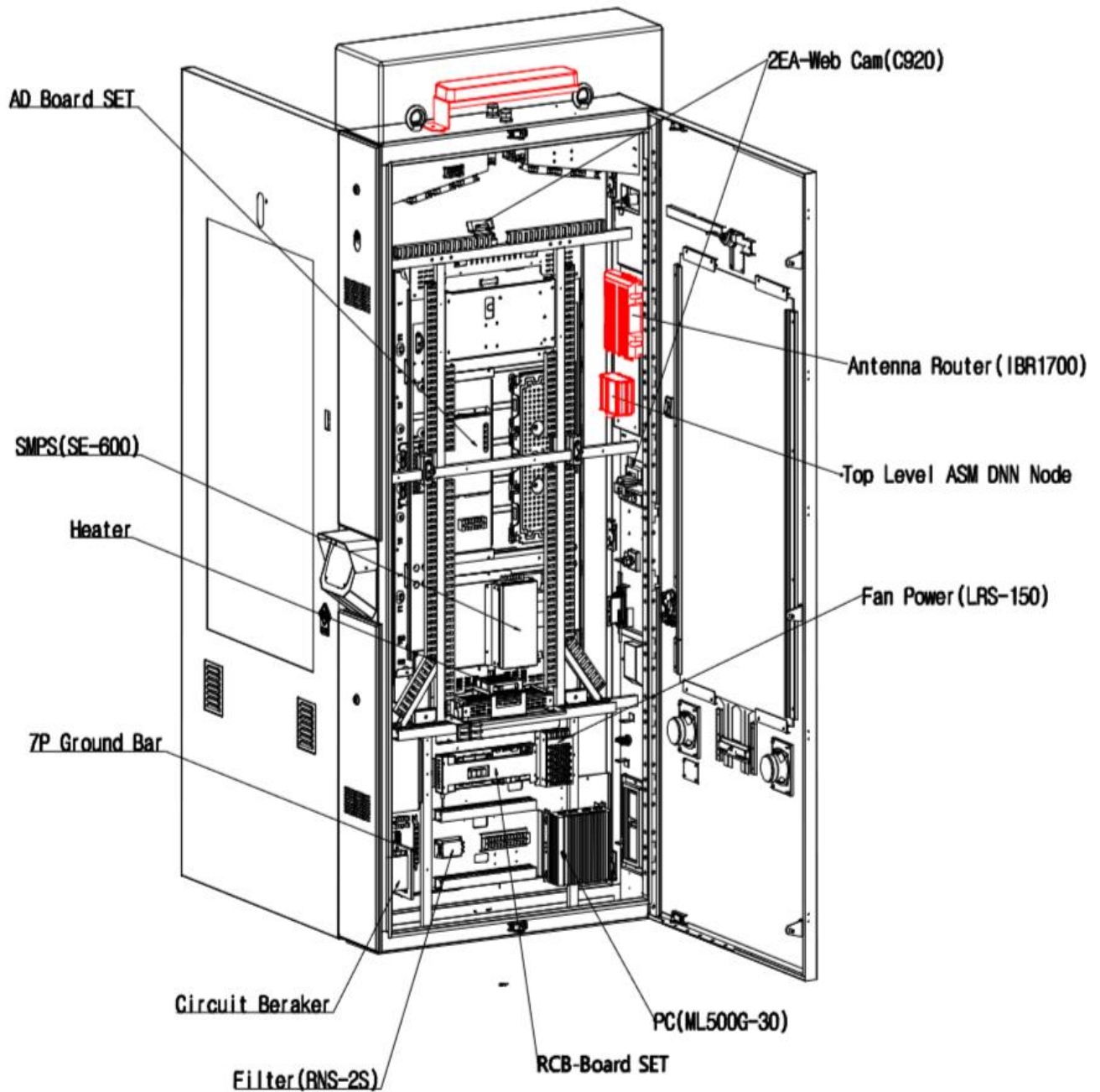
Parameter	Specification
Sealing around kiosk penetrations, windows and ventilation fans	Sealing around kiosk penetrations, windows and ventilation fans
Programming of Top Light Controller	Controller shall be programmable through serial port
Door latches and camera windows	Shall include stainless steel screws and nuts
Wiring	UL certified Power Supplies UL Code Rated Wiring Plan CAT6a LAN Communication Cable
Touch Screen Interactivity and Integration Requirement	<ul style="list-style-type: none"> a) Projected Capacitive (PCAP), multi-touch with 2point zoom, model # ZXY100-128 b) High positional accuracy (2.5mm typical) c) 92% - 100% light transmission through PCAP d) Less than 10 ms response time e) Controller shall be grounded to enclosure f) Touch screen glass requires a minimum of 5 mm clearance from edge of glass to any metal surface g) Minimum distance between front of touchscreen and back of door shall be 3 mm h) Zytronic touch screen controller shall have a protective cover to protect bare PCB
Ambient Light Sensor	<ul style="list-style-type: none"> 1) Sensor shall be positioned in same location as cameras above the monitors 2) Default setting of ambient light sensor shall be adjusted to minimum of one hour

Materials

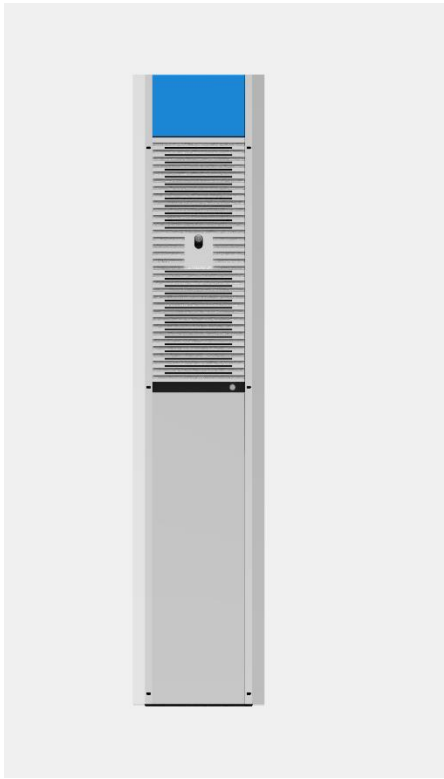


Components Layout Drawing

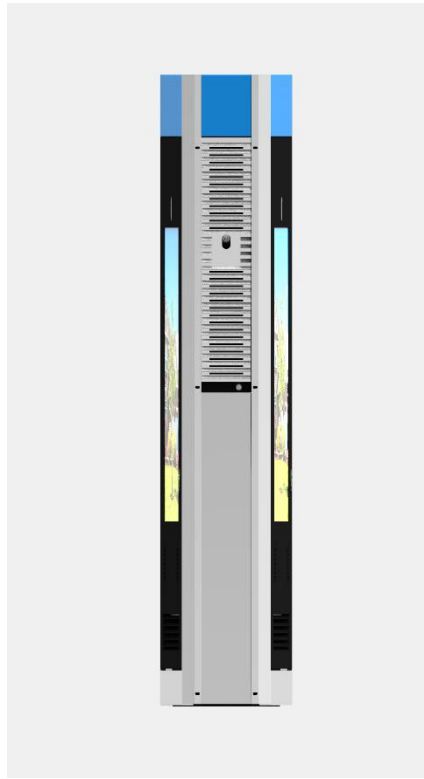
Side B



Side View A



Side View B



Managed Pro Kiosk Switch Specification

Model GS310TP

Features

- Conforms to IEEE 802.3, 802.3u and 802.3ab Ethernet Standards
- 2 Ports Dedicated SFP Fiber Ports
- 8 ports auto-negotiation 10/100/1000Mbps Ethernet RJ-45 ports
- Automatic MDI/MDIX crossover for each RJ-45 port
- Backpressure for Half-duplex mode and Flow control for Full-duplex mode
- Store-and-forward switching architecture
- 4K entry MAC address table and automatic address learning
- Jumbo Frame support (9KByte)
- L2/L3/L4 Access Control Lists
- QoS (Quality of Service) for traffic prioritization including port based, 802.1p and L2/L3/L4 DSCP-based
- Performs non-blocking full wire speed
- Snmp V1, V2c, V3 and RMON
- LED-indicator for Power, LNK/ACT

GS310TP



Adobe Acrobat
Document

[Click to open NetGear GS310TP datasheet](#)

Model GS310TP

Model Name	GS310TP
Form-Factor	Desktop
Hardware at Glance	
Parameter	Description
10/100/1000 Base-T RJ45 ports	8 ports
1000BASE-X Fiber SFP Ports	2 ports
PoE+802.3at Ports (Budget)	8 PoE+ (55W)
Power Supply	1 external PSU, DC 54V 1.25A
Fans	Fan-less
Software at Glance: Layer 2 Features	
Parameter	Description
Management	Web Browser-based GUI (HTTP/HTTPS), PC-Based Smart Control Center Utility (SCC) RMON, SNMP
IPv4 ACL and QoS	L2, L3, L4, ingress
IPv4 Multicast Filtering	IGMP Snooping, Querier, Fast Leave, L2 Multicast Router
Auto-VOIP/Auto Video	Yes
IEEE(802.3az) Energy Efficient Ethernet	Yes
MAC VLANs	8K or 16K Max MAC 64 VLANs Static, Dynamic, Voice
Convergence Advanced Features	LLDP-MED RADIUS 802.1X LACP, STP, SNMP

Environmental Characteristics	
Storage	-20°C ~ 70°C
Humidity	10% to 90%
Size	236 x 101 x 30mm
Power Full Load	69.3 W
Heat Dissipation (Max)	236.59 BTU/hr

Speaker Specification, Model NICS-100825

Impedance	8 Ohms	
Power	Nominal	25 Watts
	Maximum	50 Watts
General Specifications:		
Type	Descriptions	
Nominal Diameter	100 mm (4 inches)	
SPL	86 dB /W/M	
Frequency Range	FO - 13000 Hz	
Voice Coil Diameter	24.45 mm (1 inch)	
Voice Coil Material	Copper	
Magnet Weight	0.28 Kg (10 oz.)	
Piston Diameter	83 mm (2.9 inches)	
Magnet Gap Depth	4 mm (0.14 inches)	
Voice Winding Depth	10 mm (0.35 inches)	
Thiele/Small Parameter:		
Type	Descriptions	
DC resistance	6.2 Ohm	
Fs	79.9 Hz	
Qts	0.432	
Qes	0.532	

Qms	2.283
Vas	3.4 L (0.12ft3)
Sd	0.0031 m2 (4.8 inch2)
Xmas	2.75 mm (0.10 inches)
Vd	8.525 ccm
Half-Space Reference Efficiency	0.13%
Efficient Bandwidth	94.7 Hz
Le	0.32 mH
Cms	0.00097 m/N
BL	3.1 N/A
Rms	0.96 Kg/s
Mounting Information:	
Type	Descriptions
Overall Diameter	106 mm (4.1 inches)
Bolt Circle Diameter	116 mm (4.5 inches)
Baffle Cutout Diameter	102 mm (4.0 inches)
Depth	55 mm (2.1 inches)
Net Weight	0.74 Kg (1.63 lb.)



LED Lighting Box Specification

Model NIG563ZEGBW

Features

- ROHS and PB free
- I.C compatible
- EIA STD package
- Compatible with automatic placement equipment
- Compatible with infrared reflow solder process
- Preconditioning: accelerate to JEDEC level 3

Parameter	Symbol	LTST-G563ZEGBW				Test Condition	Unit
			Red	Green	Blue		
Luminous Intensity	IV	Min.	500	1400	240	I _F = 20mA	mcd
		Typ.	-	-	-		
		Max.	1000	2200	480		
Viewing Angle	2θ _{1/2}	Typ.	120			I _F = 20mA	deg
Peak Emission Wavelength	λ _p	Typ.	630	523	458		nm
Dominant Wavelength	λ _d	Min.	619	520	460	I _F = 20mA	nm
		Typ.	-	-	-		
		Max.	628	530	470		
Forward Voltage	V _f	Min.	1.9	2.9	2.9	I _F = 20mA	V
		Typ.	-	-	-		
		Max.	2.4	3.4	3.4		
Spectral Line Half-Width	Δλ	Typ.	15	25	20	I _F = 20mA	nm
Reverse Voltage	VF _z	Min.		-	-	IF _z = 10mA	V
		Typ.		6.5	6.5		
		Max.		-	-		

Luminous Intensity Color: <u>Red</u> , Unit: mcd @ 20mA		
Bin Code	Min.	Max.
1R	500.0	700.0
2R	700.0	1000.0

Tolerance on each Intensity bin is +/-15%

Luminous Intensity Color: <u>Green</u> , Unit: mcd @ 20mA		
Bin Code	Min.	Max.
1G	1400.0	1800.0
2G	1800.0	2200.0

Tolerance on each Intensity bin is +/-15%

Luminous Intensity Color: <u>Blue</u> , Unit: mcd @ 20mA		
Bin Code	Min.	Max.
0B	1400.0	1800.0

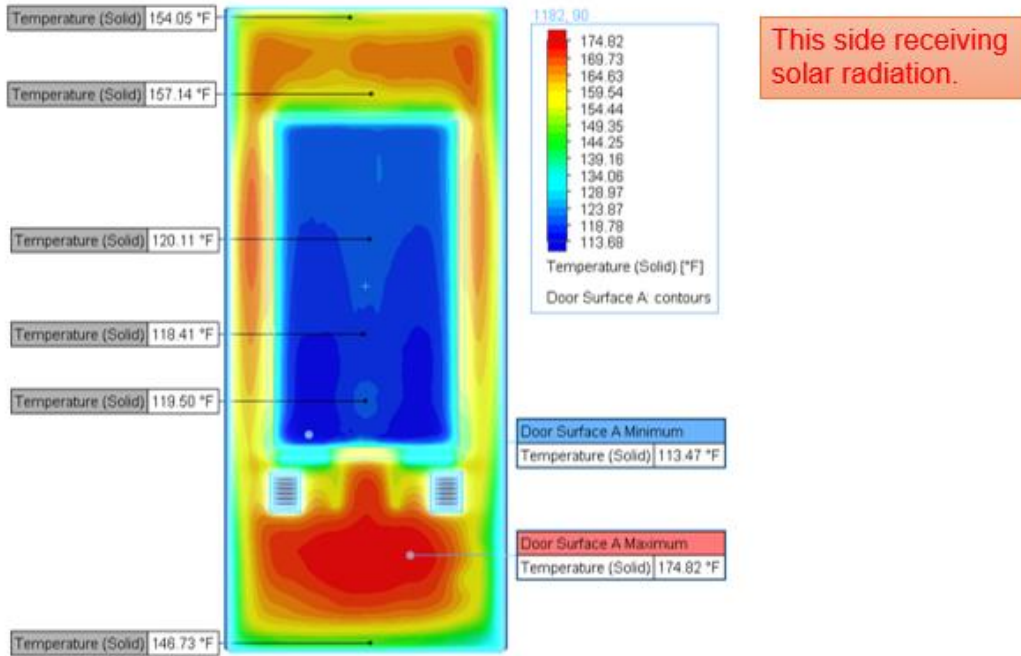
Tolerance on each Intensity bin is +/-15%

Recommended Soldering Conditions

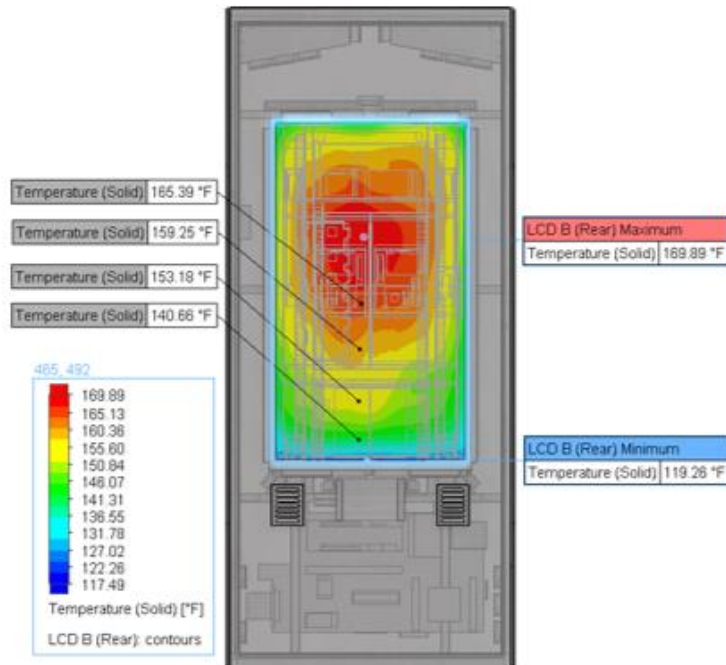
Reflow soldering		Soldering iron	
Pre-heat	150 ~ 200°C	Temperature	300°C Max.
Pre-heat time	120 sec. Max.	Soldering Time	3 sec. Max. (one time only)
Peak Temperature	260°C Max.		
Soldering Time	10 sec. Max. (Max. two times)		

Thermal Studies

Surface Temperature of Door A



Temperature of LCD B rear side



Additional Options Include:

- Axis F44 integrated Camera
- Cradle Point, 5G Modem
- K9 Pro Integration
- VIX CR600 Validator

Axis F44 Main Unit

Video

Parameter	Specification
Video compression	H.264 (MPEG-4 Part 10/AVC) Baseline, Main and High Profiles Motion JPEG
Resolution	1920x1080 (1080p)a to 480x270 1280x720 to 480x270
Wide dynamic range	Forensic WDR
Frame rate	In 1080p with no WDR: up to 12.5/15 fps (50/60 Hz) In 720p with no WDR: up to 25/30 fps (50/60 Hz) In 720p with WDR: up to 12.5/15 fps (50/60 Hz)
Video streaming	Multiple, individually configurable streams in H.264 and Motion JPEG Axis Zipstream technology in H.264 Controllable frame rate and bandwidth VBR/MBR H.264 Quad view, max 1080p resolution 25/30 fps (50/60 Hz) with 720p capture mode 12.5/15 fps (50/60 Hz) with 1080p capture mode
Image settings	Compression, color, brightness, sharpness, contrast, white balance, exposure value, exposure control, exposure zones, local contrast, rotation, Corridor Format, text and image overlay, privacy mask, mirroring of images Wide Dynamic Range – Forensic Capture: Up to 120 dB depending on scene

Audio

Parameter	Specification
Audio streaming	Two-way
Audio compression	AAC-LC 8/16 kHz, 8-64 kbit/s G.711 PCM 8 kHz 64 kbit/s G.726 ADPCM 8 kHz 32 kbit/s or 24 kbit/s Configurable bit rate
Audio input/output	External microphone input or line input, line output

Network

Parameter	Specification
Security	Password protection, IP address filtering, HTTPSb encryption, IEEE 802.1Xb network access control, Digest authentication, User access log, Centralized Certificate Management
Supported protocols	IPv4/v6, HTTP, HTTPSb, SSL/TLSb, QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, Bonjour, UPnP, SNMPv1/v2c/v3 (MIB-II), DNS, DynDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, RTCP, ICMP, DHCP, ARP, SOCKS, SSH

Axis F1005-E Sensor Unit

Parameter	Specification
Models	AXIS F1005-E 3 m / 10 ft. cable: Standard, IP66/IP67-rated AXIS F1005-E 12 m / 39 ft. cable: Standard, IP66/IP67-rated

Camera

Parameter	Specification
Image sensor	1/2.8" (effective) progressive scan RGB CMOS
Lens	Fixed iris 2.8 mm, F2.0 With AXIS F34/F41/F44 in 1080p: Horizontal angle of view: 113° Vertical angle of view: 62° With AXIS F34/F44 in 720p: Horizontal angle of view: 73° Vertical angle of view: 41°
Resolutions	Max. 1920x1200/1080
Wide dynamic range	WDR – Forensic Capture With AXIS F41: 1080p, 25/30 fps (50/60 Hz) With AXIS F44: 720p, 12.5/15 fps (50/60 Hz)
Minimum illumination	Color: 0.3 lux

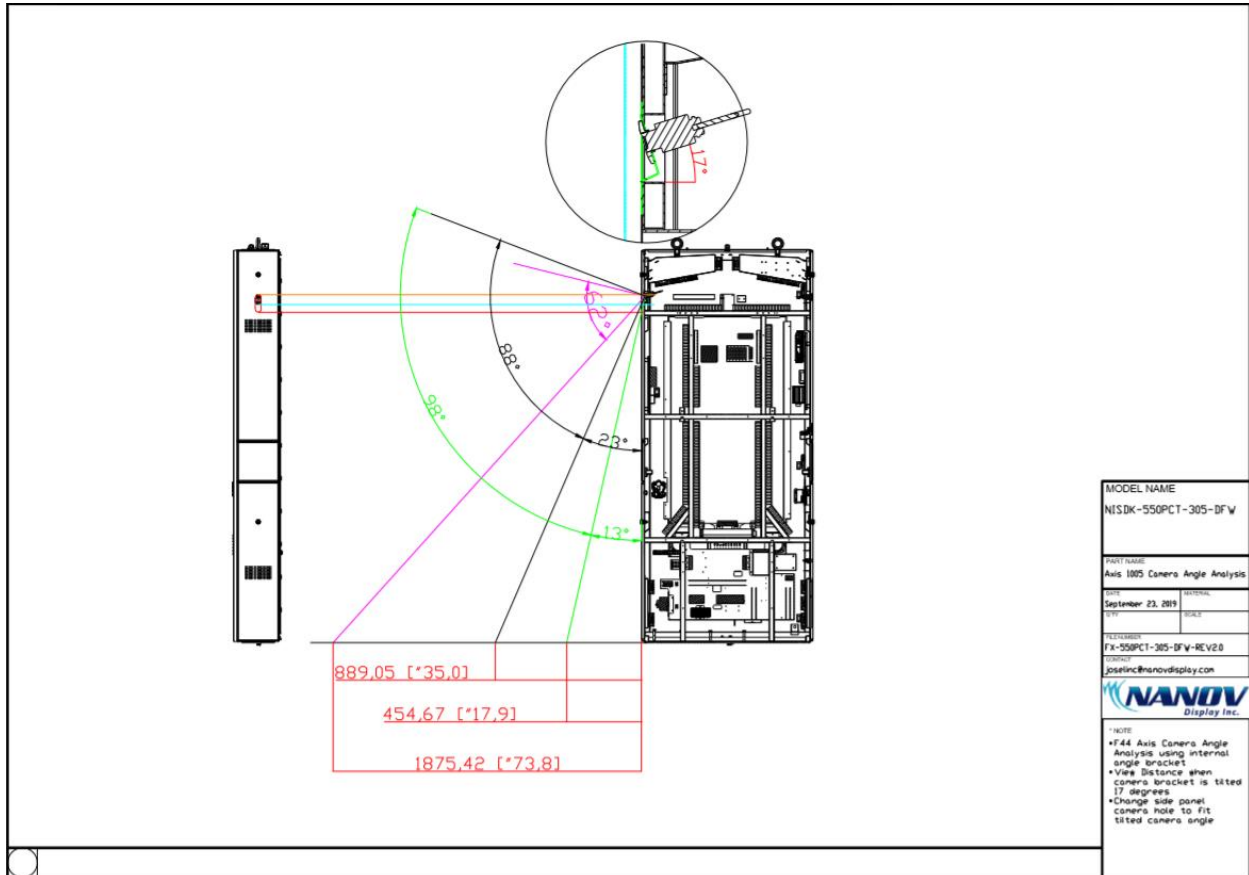
Shutter time	<p>With AXIS F34/F44: HDTV 720p 25/30 fps: 1/28000 s to 2 s 1080p 12.5/15 fps: 1/22500 s to 2 s</p> <p>With AXIS F41: HDTV 1080p 25/30/50/60 fps: 1/143000 s to 2 s WUXGA (1920x1200) 25/30 fps: 1/143000 s to 2 s</p>
Frame rate	Max. 50/60 fps (50/60 Hz)

General

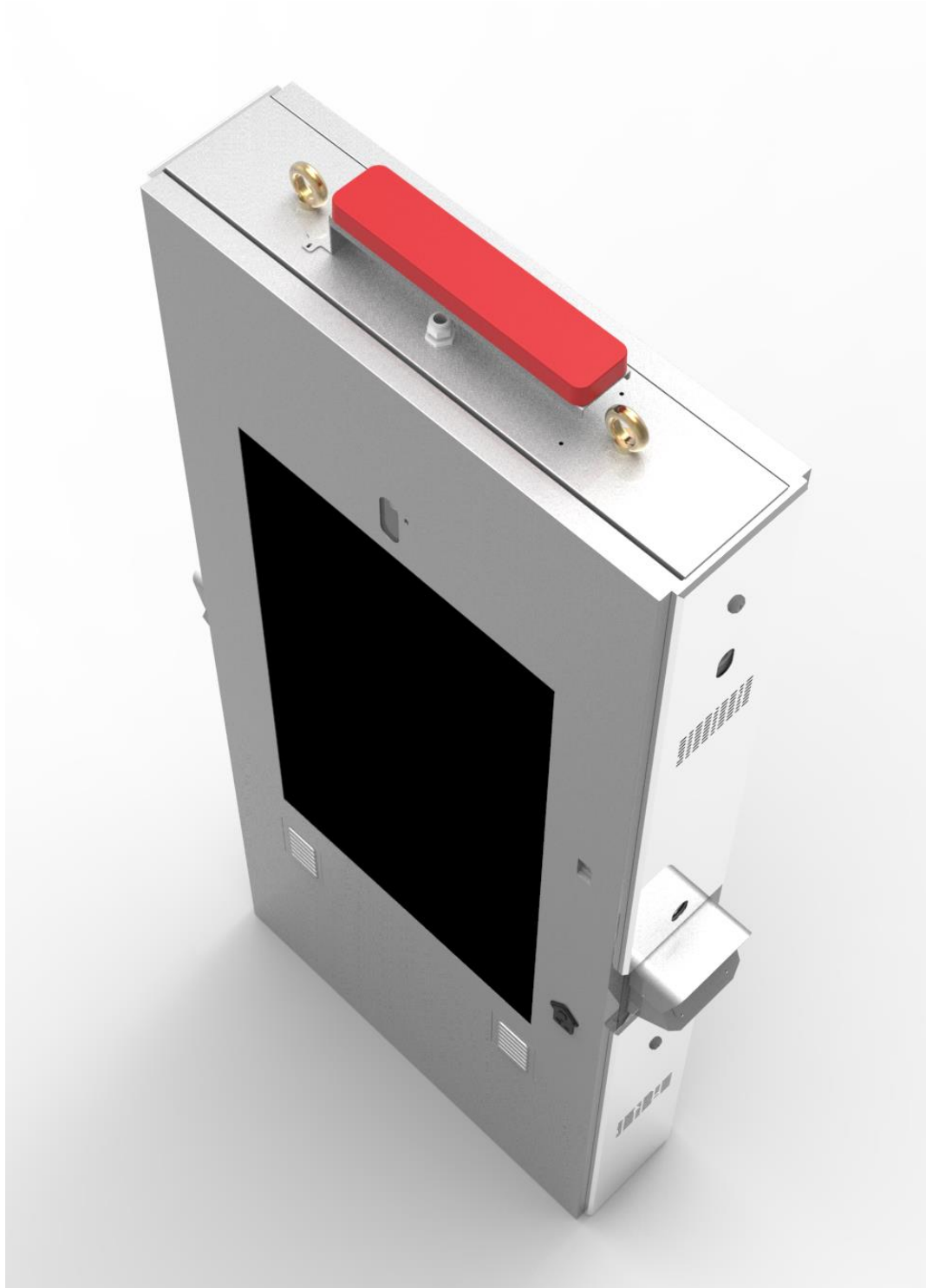
Parameter	Specification
Casing	IP66-, IP67-rated, Aluminum
Operating conditions	-30 °C to 55 °C (-22 °F to 131 °F) Humidity 10-100% RH (condensing)
Storage conditions	-40 °C to 65 °C (-40 °F to 140 °F)
Approvals	ECE R10 rev.04, EN 50121-4, EN 50581, IEC/EN/UL 60950-1, IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-14, IEC 60068-2-30, IEC 60068-2-60, IEC 60068-2-78, IEC 60529 IP4X, IEC 60721-3-5 5M3 (vibration, shock), IEC 62236-4, EN 55024, EN 61000-6-1, EN 61000-6-2, EN 61000-3-2, EN 61000-3-3 EN 55022 Class A, FCC Part 15 Subpart B Class A, ICES-003 Class A, VCCI Class A, C-tick AS/NZS CISPR 22 Class A, KCC KN22 Class A, KN24 EN 55022 Class A, FCC Part 15 Subpart B Class A, ICES-003 Class A, VCCI Class A, C-tick AS/NZS CISPR 22 Class A, KCC KN22 Class A, KN24
Dimensions	62 mm (2 7/16 in) ø 30 mm (1 3/16 in)

Weight	3 m / 10 ft. cable: 116 g (0.26 lb) 12 m / 39 ft. cable: 366 g (0.81 lb)
Required hardware	AXIS F34/F41/F44 Main Unit
Included accessories	Installation Guide AXIS F8201 Vari-angle Mounting Bracket
Optional accessories	AXIS F8203 Fixed Mount Bracket AXIS F8204 Mounting Band AXIS F8205 Bullet Accessory AXIS F8212 Trim Ring AXIS F8401 Clear Lens Protector
Warranty	Axis 3-year warranty and AXIS Extended Warranty option, see www.axis.com/warranty

Angle Comparison



K9 Pro Integration



Parsec K9 – Pro Series Antenna Specification

Model PTA PRO9K 4LTE 4WiFi GPS

Product Description

Parsec's K-9 series PTA PRO9K 4LTE 4WIFI GPS is a low height nine-in-one double MIMO LTE, double MIMO Wi-Fi, and GNSS external waterproof antenna. The PTA PRO9K 4LTE 4WIFI GPS supports either the simultaneous operation of two separate LTE modems or 4x4 MIMO. This rugged low-profile omni-directional antenna works on all of the common North American LTE bands with high efficiency. Also supports CBRS and LAA. The antenna requires a single 1.5 inch mounting hole to be placed on the top of the kiosk RF Transparent Lightbox.

Features:

- LTE frequency range: 617 – 894 MHz
1710 – 2700 MHz
3400 – 3800 MHz
5150 – 5925 MHz
- Wi-Fi frequency range: 2400 – 2483.5 MHz
4900 – 5900 MHz
- Double MIMO LTE
- High Isolation
- High Efficiency: 70%
- Low Height

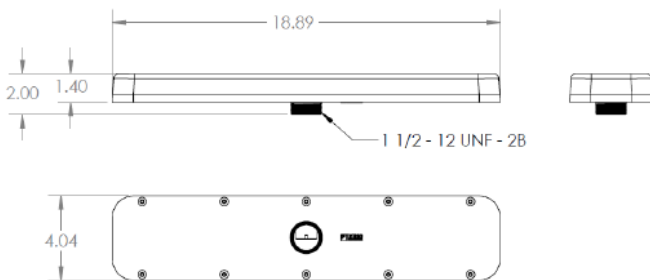


Figure 2. Product Dimensions



Modem Specification

Cradle point Model COR IBR1700

Parameter	Specification
Model	MA1-17001200-NNA
LTE	Embedded 600 Mbps or 1 Gbps* LTE Advanced Pro modem & DC-HSPA+ fallback
WIFI	Simultaneous Tri Band 802.11 a/b/g/n/ac Wave 2 MU-MIMO
Material	Metal
Ignition Sensing	Automatic ON & time-delay OFF
OBDII Support	Yes, with accessory cable
Input Range	9-33 VDC (and low voltage shutoff)
Weight	3 lb. 7 oz (1.7 kg)
Support	Phone support: 24-hour weekdays with emergency response on weekends, Web: 24x7, Chat: 24x5
Cloud Managed	Yes, with NetCloud Manager
Carriers / Operators	AT&T, Verizon, T-Mobile, Sprint, Canada (Bell, Rogers, TELUS), Europe, Australia/New Zealand***
Ethernet Ports	5 LAN/WAN switchable 10/100/1000
Ruggedized	Yes, IP64, Shock/Vib/Humidity MIL Spec 810G & SAE J1455
GPS / GNSS	Yes, with active antenna & dead reckoning (GNSS/GPS + 3D Accel. + OBD-II)
Operating Temperature	-30 °C to 70 °C (-22 °F to 158 °F)
Size	8.8 × 7.5 × 1.7 in (224.3 × 190 × 44 mm)

Fallover	Yes
Dual Modem Capable	Yes, field-upgradable MC400 modem slot



Validator Specification

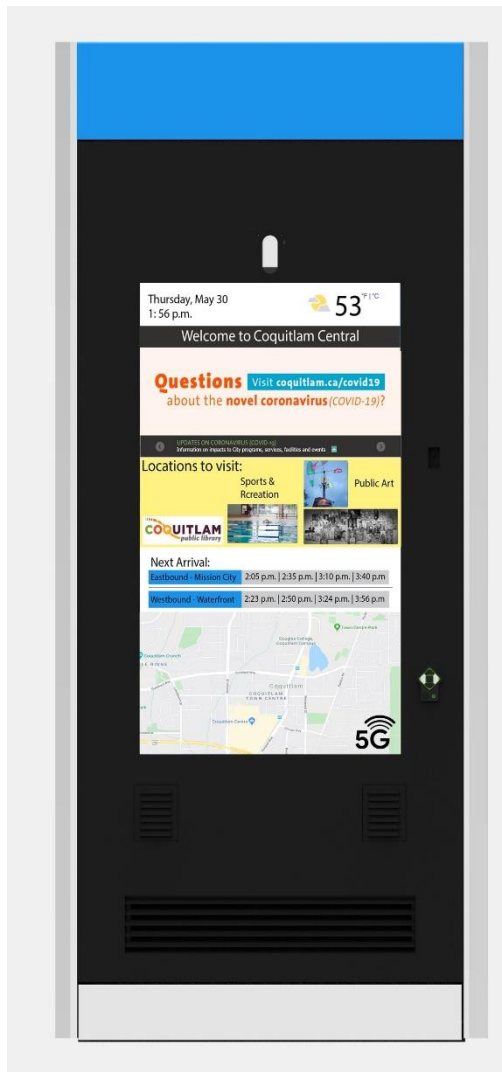
Model: VIX CR600

General Specifications:	
Type	Descriptions
Configuration	400MHz ARM9 One ISO 7816 compliant SAM socket, 128MB RAM able to communicate at up to 625Kbps 128MB Flash Supports Linux 2.6.31 or newer
Compliance	Vix supplies products to meet many local and globally recognized standards such as CE, RoHS, various smartcard standards and many others. For more details on how Vix can meets your local requirements please contact Vix directly.
Panel, Gate and Desktop Configurations:	
Type	Descriptions
Compliance	Certified to EMV2.0.1
Dimensions	Panel: 148mm x 128mm x 38mm, Desktop: 141mm x 107mm x 32mm
User Interface	Colour TFT LCD (3.5" 1/4VGA) RGB LED ring around the display for user feedback Audio feedback >=72dBA at 1m
Antenna	Card reader antenna extends around the circumference of the unit, providing maximum target for reading cards
Physical Features	Can be used on a desktop and also panel or wall mounted
Features	10/100Mbps Ethernet Digital audio-driven speaker Diagnostics port with RS232 1 x High Speed USB2.0 Host or Device RS422 serial connection - at up to 460kbps 1 x Full Speed USB2.0 Host Support for wide input voltages - min 9-38v Battery-backed real time clock

Antenna:	
Type	Descriptions
Configuration	EMV level 1 capable
Dimensions	104mm(w) x 67mm (d) x 20mm (h)
Antenna	Ferrite-backed antenna included for maximum read range
Physical Features	Suitable for integrating into kiosks, vending machines, or any equipment requiring contactless payment capability
TP5 Upgrade Kit:	
Physical Features	Mount kit for conversion of Vix TP5000 and TP5700 ticketing machines for AFC integration with EMV payments



Concept Drawing NISDK-550PCT-505-COQ (No validator)



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