MERIDIAN
CONCEPT TO COMPLETION

Personnel Management Kiosk

Date   Time

Admittance
Body temperature 97.3°F

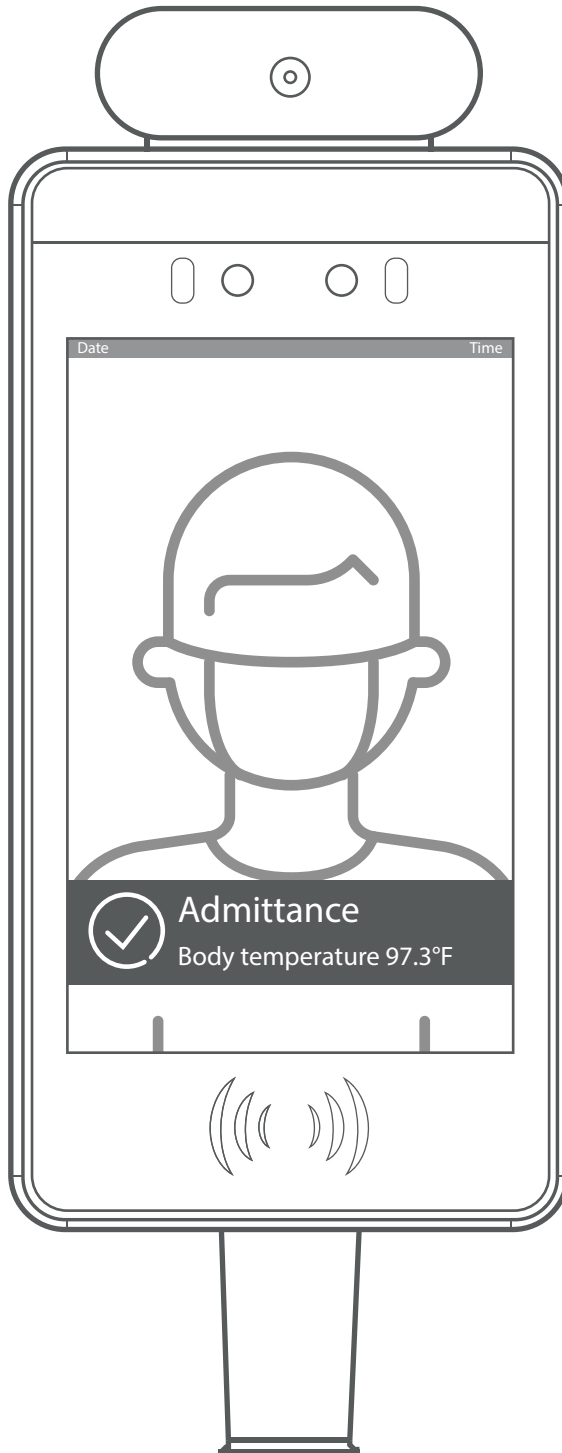**Version 1.0**

www.meridiankiosks.com/pmk-resources/

For FAQs and other support information for this product, visit the above site.

This device is not FDA-cleared or approved. This temperature device should not be solely or primarily relied upon to diagnose or exclude a diagnosis of COVID-19, or any other disease or health condition. Elevated body temperature in the context of use should be confirmed with secondary evaluation methods, such as a non-contact infrared thermometer or clinical grade contact thermometer.

Public health officials, through their experience with the device in the particular environment of use, should determine the significance of any fever or elevated temperature based on the temperature readings of this device.

Product Information
Product Name: Personnel Management Kiosk (PMK)
Product Type: Indoor
Product Model: PMK-001

Thank you for choosing Meridian's Personnel Management Kiosk (PMK). This product uses the thermal image of a person's face to accurately determine a person's skin surface temperature. The PMK features temperature verification capabilities and can also be programmed for facial identification.

Safety Precautions ⚠
• Use of the PMK is not intended as a substitute for consultation with your physician. Please consult your internal protocol in the event of an abnormal temperature reading.
•Never stand, climb, sit, or hang on the device.

Caution ⚠
1. PMK readings should be regarded as a reference. Do not attempt self-diagnostics or self-treatment using the temperature readings. Please seek professional medical advice when necessary.
2. There is no absolute standard for human body temperature. Knowing your own normal body temperature range is important to accurately determine if you have a fever.
3. The forehead of the subject should be free from sweat, hair and other obstructions before measuring.
4. Users should not drink, eat, or be physically active immediately before/while taking a reading. Temperature readings taken when a body is in a state of stable equilibrium are more accurate.
5. It is normal for readings taken from continuous measurements to fluctuate within a small range.
6. Do not directly face the sun or the air outlet of an air conditioning or radiator device during measurement, as this can cause changes to the forehead temperature. Measurements should be taken in a stable environment.
7. Avoid dropping or subjecting the product to external forces during installation or use.
8. Do not measure body temperature in an environment with strong Electromagnetic interference (examples include places close to a working microwave, induction cooker, or a cellphone in-use) as EM interference may cause errors in the reading or even device failure.

Caution (CONT)

9. We suggest calibrating your device once a month or more frequently if you have fluctuations in your ambient temperature of more than 2.0°C (5.6°F).
10. This device has been evaluated to standards similar to IEC 80601-2-59:2017: Medical electrical equipment – Part 2-59: Particular requirements for the basic safety and essential performance of screening thermographs for human febrile temperature screening.

Cleaning

1. Clean and sanitize the product properly to prevent cross contamination.
2. To clean the PMK, gently wipe the kiosk with a clean microfiber cloth sprayed with a 70% isopropyl alcohol based solution. Be sure to prevent liquid from entering the kiosk components. Wipe the kiosk dry with a clean microfiber cloth.
3. Do not directly touch the thermal sensor with your fingers or blow on it. Measurements taken using a damaged or dirty thermal sensor may be inaccurate.
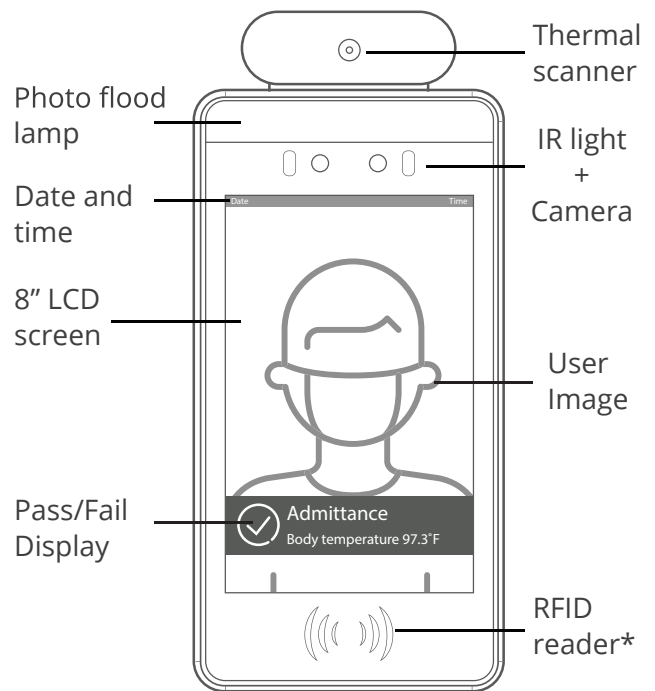
About the Product

1. This product is a precision device. To ensure accurate measurements, keep the device from direct liquid contact. Avoid tiny particles falling onto the sensor.
2. To access the application settings, use the provided keyboard and mouse.
3. Visit our resource webpage for instructions on how to use the included keyboard and mouse.

Overall Description

The PMK is comprised of a cast aluminum casing, thermal sensor, LED lights, dual lens camera, non-touch LCD display, and an optional RFID reader.

Thermal scanner
Photo flood lamp
IR light + Camera
Date and time
8" LCD screen
User Image
Pass/Fail Display
Admittance
Body temperature 97.3°F
RFID reader*

*Optional

Dimensions: 11.67 in x 5.23 in x .97 in
(29.64 cm x 13.28 cm x 2.5 cm)
Weight: 2.9 lbs (1.3 kg)

Product Performance

- Reference Body Site: Face/forehead
- Measurement Distance: 20 in (50 cm)
- Power Input: 100 - 240V 50/60Hz
- Power Output: DC12V (±10%)
- Power Consumption: 13.5W (Max)
- Measurement Range: 50°F - 107.6°F
(10°C - 42°C)
- Temperature Variance: ±0.9°F (±0.5°C)
- Expected Product Life Span: 5 Yrs
- Operating System: Android
- Operating Conditions:
  - Temperature: 32°F - 140°F (0°C - 60°C)
  - Humidity: 10% - 60%
  - Indoor use only

Parameters

Camera	Resolution	2 MP (Mega-Pixels)
	Type	Binocular wide dynamic camera
	Aperture	F2.4
	Focusing Distance	20 in - 60 in (50 cm -150 cm)
	White Balance	Auto
	Photo Light	LED and IR dual photo light
Screen	Size	8.0 in (20.32 cm) IPS LCD screen
	Resolution	800 × 1280 Pixels
	Touch	Not supported
Processor	CPU	RK3288 quad-core
	Storage	8GB (Embedded Non-Expandable)
Interface	Network Module	Ethernet and wireless 2.4GHz (WiFi)
	Audio	2.5W / 4R speakers
	USB	USB 2.0 (2 Ports)
	Serial Communication	1 RS232
	Relay Controller Signal	0/12 volts switching (Dry Contact)
	Wiegand	One Wiegand 26/34 output, one Wiegand 26/34 input
	Wired Network	1 RJ45 Ethernet socket

Function	Face Detection	Support
	Face Library	Up to 20,000
	1: N Face Recognition	Support
	1: 1 Face Comparison	Support
	Stranger/Visitor Detection	Support

Mouse Instructions

Right Mouse Button
The right mouse button can be used to exit a page or go back. It can also be used to bring up the password prompt to access the Android home screen.

Center Mouse Button
The center mouse button can be used to bring up the password prompt to access the application settings. Please note, the button must be clicked, not scrolled.

Left Mouse Button
The left mouse button is used to make selections.

Access In-Depth Manuals

• Scan this QR Code to access videos, FAQs, and other guide materials to help you get your device up and running as quickly as possible.

• You can also visit this website: https://www.meridiankiosks.com/pmk-resources/

SCAN ME

Temperature Reading Calibration

Your PMK arrives in a calibrated state from the factory, using a blackbody device as a reference temperature source. Once set-up is completed, verify the readings of the PMK based on an FDA cleared thermal forehead thermometer. If needed, adjust the temperature compensation value of the PMK. Temperature compensation on the device must be entered in Celsius. Please refer to our website for details. We suggest calibrating your device once a month or more frequently if you have fluctuations in your ambient temperature of more than 2.0°C (5.6°F).

Body Temperature

1. Body temperature varies from person to person and fluctuates during the course of the day. For this reason, it is suggested to know one's normal, healthy forehead temperature to accurately determine the temperature.
2. Reading times may differ according to skin tone, measurement distance, and lighting conditions.
3. Different measurement methods may give different readings. Therefore, you should compare your readings from the PMK to an IR forehead thermometer.
4. Instances that can affect the temperature reading of an individual:
   • Wearing glasses
   • Hair covering the forehead
   • Hats and other head coverings
   • Direct sunlight on the kiosk or user
   • Medical conditions that raise the surface temperature of the face
5. If an abnormal temperature is detected on an individual that has just come inside, please wait at least 3 minutes before taking another measurement.

Instructions for Use

1. After removing the PMK from its packaging, inspect the kiosk and power cord for damage.
2. Plug in the power cord to turn the kiosk on. Wait 10 minutes.
3. The thermal scanner will first scan the current ambient temperature distribution after turning on. During this 10 to 20 second process, it is best not to have anyone in the scanner's field of view.
4. Avoid direct sunlight, areas with extreme high or low temperatures, high humidity, vibration, radiation, and corrosive chemical environments.
5. Do not install near radiant heat sources and avoid high temperature objects in the field of view.
6. All electrical safety regulations must be strictly observed. A surge protector is recommended.
7. Protect the power cord from being walked on or pinched. Do not pull out the plug by tugging at the cord and never touch the power cord when your hands are wet. Never make a knot in the cord.
8. Please use the power adapter provided. If it is ever damaged contact technical support. For specific requirements of the power adapter, see the product performance section.
9. The kiosk should not be facing a reflective background such as glass. If there is glass, cover it with an opaque material with a color closer to white than black.
10. If you change kiosk locations, wait 10 minutes after power up to take a temperature measurement.
11. When choosing a kiosk location, the number of individuals being screened and their rate of presentation need to be considered.

12. This device should be used to screen only one subject at a time. The individuals to be screened should stand in a single file line, while respecting social distancing guidelines, and stop at the PMK for their temperature screening.

13. If the product does not work properly, do not disassemble or modify the product in any way. Meridian does not assume any responsibility for problems caused by unauthorized modification or repair.

14. Do not immerse the product in water.

15. Please understand that you are responsible for properly configuring all passwords and other security settings.

16. Default application password is "123456". Any new password **MUST** be 6 characters or less. **PASSWORD CANNOT BE RESET OR RECOVERED ONCE CHANGED!** If the password is lost, the head unit will need to be returned to factory to be manually reformatted. There will be a $200 charge, plus shipping, for this service. Please send request to help@mzero.com for return authorization.

17. Contact technical support if you believe your device needs to be serviced. There are no operator serviceable components in the PMK.

References
This document provides information consistent with the guidelines in ISO/TR 13154:2017: Medical electrical equipment-- Deployment,implementation and operational guidelines for identifying febrile humans using a screening thermograph.

Compliance
Do not change or modify this device without expressed approval from the manufacturer. It could void your warranty.

Measurement Process
1. Approach the front of the kiosk until your face fits the designated area on the screen. The ideal distance for measuring the temperature of an individual is 20 inches (50 cm).

2. After 1-3 seconds, the screen will display your temperature reading.
When a normal temperature is detected, a message will tell the user if they have a normal temperature.

3. When a high temperature is detected the photo flood lamp will turn RED and an alarm will sound for a few seconds.

4. You can toggle the temperature threshold and other settings in the application.

Acceptance Process
1. The individual needs to be preprogrammed into the face database and/or have Stranger/Visitor Mode on.

2. After 1-3 seconds, the screen will display your temperature reading.
When a normal temperature is detected, a message will tell the user if they have a normal temperature and the photo flood lamp will turn GREEN. A second message will display showing the use has been admitted.

FCC
This device complies with Part 15 of the FCC Rules.

CE
This device is in compliance with all directives applicable to CE.
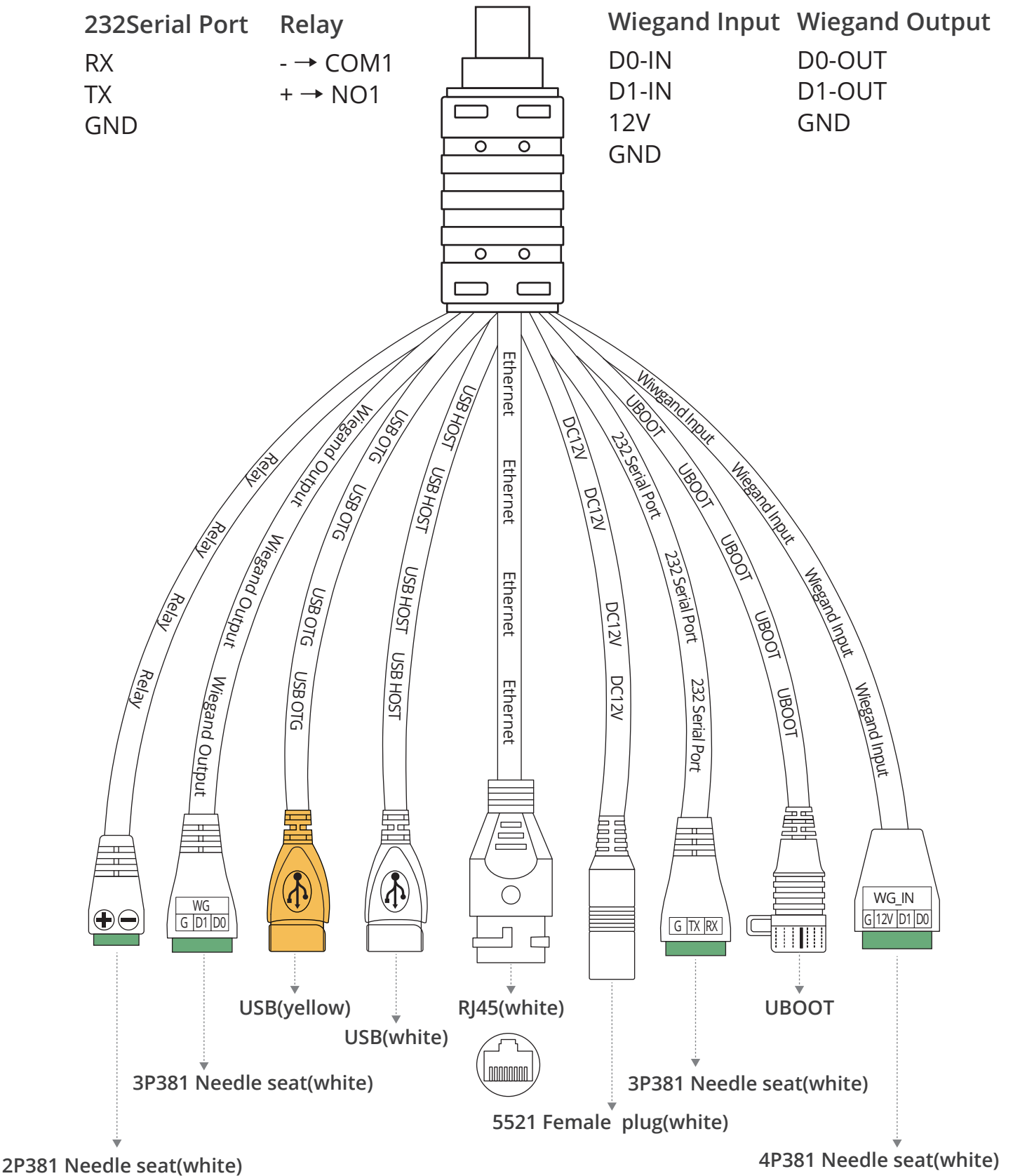
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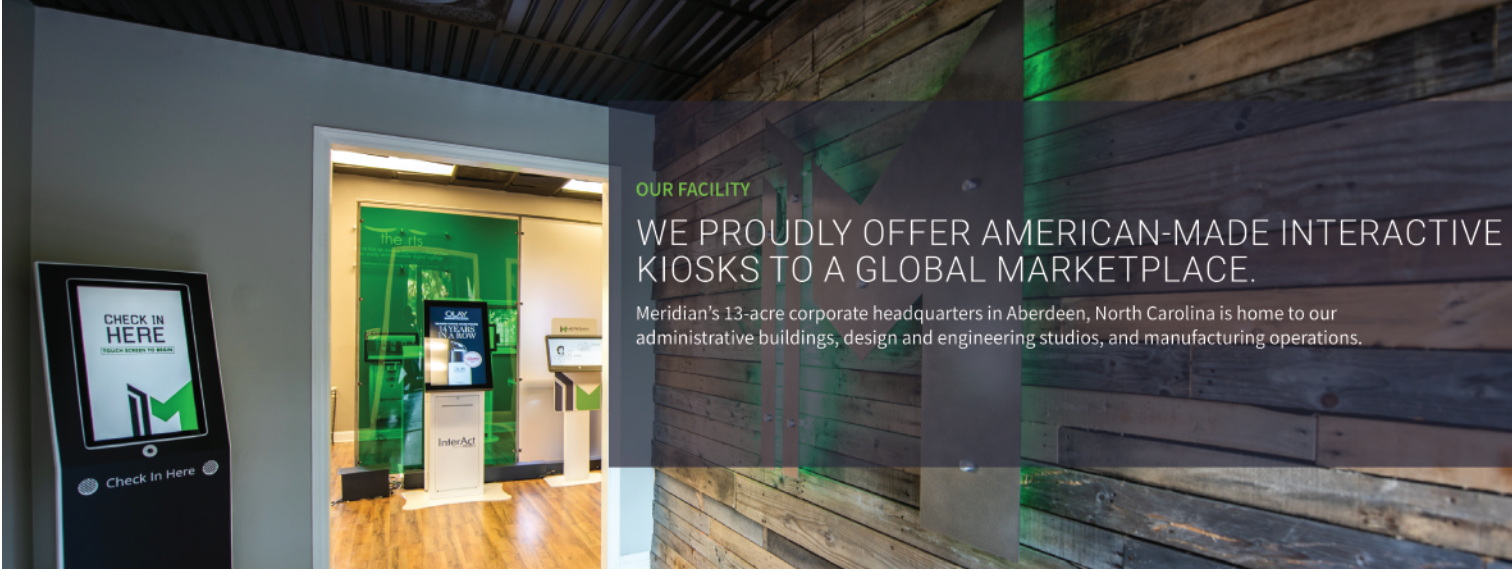
232Serial Port
RX
TX
GND

Relay
- → COM1
+ → NO1

Wiegand Input
D0-IN
D1-IN
12V
GND

Wiegand Output
D0-OUT
D1-OUT
GND

Relay

Relay

Relay

Relay

Wiegand Output

Wiegand Output

USB OTG

USB OTG

USB OTG

USB HOST

USB HOST

USB HOST

Ethernet

Ethernet

Ethernet

Ethernet

DC12V

DC12V

DC12V

232 Serial Port

232 Serial Port

232 Serial Port

UBOOT

UBOOT

UBOOT

UBOOT

Wiwgand Input

Wiegand Input

Wiegand Input

Wiegand Input

WG
G | D1 | D0

G | TX | RX

WG_IN
G | 12V | D1 | D0

USB(yellow)

USB(white)

RJ45(white)

UBOOT

3P381 Needle seat(white)

3P381 Needle seat(white)

5521 Female plug(white)

2P381 Needle seat(white)

4P381 Needle seat(white)

ABOUT MERIDIAN KIOSKS

Meridian is a fully integrated manufacturer of indoor and outdoor kiosks, interactive digital signage, and self-service software. As a complete end-to-end self-service innovator, Meridian develops products and services all under one roof, providing greater efficiency, and lean, high-quality results.

For over two decades, we've helped our partners succeed by designing, engineering, manufacturing, and integrating hardware and software solutions from our 13-acre headquarters in North Carolina.

| QUALITY | SCALABILITY | OVERSIGHT | EFFICIENCY |

Fast Facts
· ISO 9001:2015 Certified
· UL Self-Certify Facility
· 13-Acre Manufacturing Campus
· Kiosks Deployed Across All Industries

· Partners Include HP, Samsung, and Intel
· Experts in ADA, FCC, and HIPAA
· Full Scale Production Facilities
· Kiosk Financing Available

CONTACT US
Let Meridian's team of experts guide you through your self-service solution.

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INDOOR SOLUTIONS

Meridian's indoor kiosk lineup includes 11 standard indoor models, many of which are available in numerous formats including freestanding, wall mounted, and countertop models. Crafted from cold rolled steel, our indoor kiosks are designed for a variety of use cases, including check-in, bill payment, interactive digital signage, ticketing, and more.

EVOLUTION

PRESENZA

NAVIGATOR LITE

mBOX

OUTDOOR SOLUTIONS

Meridian's outdoor solutions are usable in any weather, including direct sunlight and extreme temperatures. All of our outdoor kiosks include a rugged enclosure with high-quality dual stage powder coat finish, tempered or laminated safety glass, weather proofing and climate control.

PRESENZA

mBOX

VIC