



Solutions. Technology. Simple.

Airo® I-Safe™ 28



- **ATEX Zone 1, IECEx Zone 1 (World Certification)**
- **Super-rugged - IP67, MIL-STD-810-F/G**
- **eButton™ - Emergency Response Service**
- **Intrinsically safe 3.2 MP digital camera**
- **Data Capture (Optional): Barcode, RFID, Smartcard, Biometric scanner, Zigbee wireless**

The Airo® I-Safe™ 28 is designed and manufactured to meet the highest standards of safety under international standards, including the US Underwriters Laboratory Standard 913 (UL-913), the EU ATmosphères EXplosives (ATEX) Directive, and the IEC System for Certification to Standards relating to Equipment for use in Explosive Atmospheres (IECEx System), which together provide Airo's world-wide certification coverage for global enterprises. These are highest level certifications, for instance the ATEX certification is under standard EN 60079-11 the ATEX assessment criteria for Zone 1 explosive atmospheres carrying the Marking: ATEX II 2G Ex ib IIC T4 (IECEx Gb). In addition, the Airo® I-Safe™ 28 operates on 600+ HSPA+/UMTS networks worldwide. This combination enables workers in hazardous

gas and dust environments around the world to maintain communications, run applications and capture mission critical data in a small, lightweight, use-anywhere smartphone, with confidence.

Features

Thousands of Business Specific Applications: Airo® handsets run the software used by all the world's top corporations, from Microsoft Office and Outlook, to applications written specifically to address problems in Compliance, Regulation, Operations, Lone Worker Protection and Emergency Response.

Super-Rugged for Enterprise Use: Tested tough to very high standards - IP67 certification means excellent dust, dirt and water resistance, while MIL-STD-810-F/G ratings for Drop, Shock, Vibration, Humidity, Water, Sand & Dust means its tough enough for the U.S. Military, or your workforce. Drop it on a concrete floor or in a muddy jobsite without missing a step.

Best-in-Class GPS Capture: Not only does Airo® give you very precise location information and blazing fast Time-To-First-Fix, you also get anti-jamming technology to further ensure good, clean, geo-located data to run your enterprise, and keep track of human assets.

Emergency Response: When activated by a user, eButton™ simultaneously delivers location data and connects a voice call at the push of a button, launching a proprietary "Triage" function that allows users to communicate in a customised protocol to designated response centers, keeping your field forces and business safer.

Global Remote Management: Airo® devices enable Mobile Device Management so you can manage all your devices including things like user rights and privileges, response escalation, messaging protocols, remote device management, tracking/location, geo-fencing (inclusion/exclusion), routing, rescue service provisioning, enterprise peripheral data management, and remote login/logout dead man alert, among others to generate maximum value in the place where things happen... the work site.

Superior Security: In a time when wireless communications are easily intercepted, Airo® offers 256 AES voice and data encryption to ensure that private information remains private and controlled, while devices can be remotely wiped or bricked in order to provide even more security.

Intrinsically Safe High Res 3.2 MP Digital Camera: In times of high regulation and record keeping demands, the camera is useful to capture visual data, like pictures of conditions on the ground, video of problem areas, or even to capture barcodes without an unwieldy enterprise device.

Field Force Management: The perfect tools for managing your human assets, Airo® devices run all the best logistics, route planning and assets tracking programs, and are built for PTT use. Excel at intelligent scheduling and dispatching of assets to different locations, while minimising costs and maintaining great customer service.

Proprietary Middleware Service: Airo® middleware enables highly secure, low latent (worldwide), low cost, two-way data communications that allow you to integrate beneficial back-office applications (your custom app, third-party app, etc.) into your mobile environment, lowering TCO and creating greater control and consistency across your IT infrastructure.

Ongoing Support: You can act with confidence knowing that the Airo® I-Safe™ 28 will be around. Support is planned for three years and the popularity of the device ensures it. For ease of use and incorporation, leasing and Premium Care are offered.

Technical Specifications

PHYSICAL SPECIFICATIONS

Super Rugged Monoblock
Base Dimensions: 142.2mm x 68mm x 24.4mm
Weight: 296 grams
Display Type: Resistive Touch (works with gloves)
Size: 2.8 inch diagonal (320x240)
Color: TFT, 16 million colors, luminous
Color Depth: 16 bit/pixel
Backlight: Low Power LED
Keyboard: QWERTY Touchscreen, Alphanumeric
Expansion Slot :2 Gigabyte microSD slot
Audio Enhanced Audio with Noise Cancellation
Dedicated Speakerphone
Audio jack 3.5mm Barrel Jack
Notifications Alert LED's, Audio Notices, Vibratory Notices

ENVIRONMENTAL

Certifications Ingress Protection 67
Military Standard 810 F/G
Achievements Temperature: -20C to 50C (-4F to 122F)
Drop: 1.25 M drop to concrete 26 times
Shock: 20 G's peak
Vibration: 0.001 g2/Hz at 12.5 Hz, 0.034 g2/Hz at 20-40 Hz, 0.0000057 g2/Hz at 200 Hz, 1 hr/axis duration
Humidity: 95% for 48 hours
Water: 26.5 Liters of water per 929 cm2
Sand/Dust: Zero ingress of sand/dust
Sealing: Meets and exceeds IP 67 performance

PERFORMANCE SPECIFICATIONS

Operating System: Microsoft Windows Embedded Handheld 6.5
CPU: Marvell® XScale PXA270, 640 MHz
Instruction Set - ARMv5TE
Memory: ROM Type - Flash EEPROM
RAM - 128MB
Flash - 128MB
2GB microSD Capacity

BATTERY

Type: Lithium Ion Polymer
Capacity: 1960 mAh at 3.7V
Standby Time: 250 hours
Talk Time: 6 hours (WAN)

NETWORKS

Five Band UMTS 800/850/1900/AWS/2100 MHz
Quad Band GSM 800/850/1800/1900 MHz
UMTS/HSPA+, 3GPP Release 6/7

WI-FI

Radio: Tri-Mode IEEE® Wi-Fi 802.11 a/b/g/n
Security: WPA2, 802.1x, EAP-TLS/TTLS, PEAP/LEAP, EAP-FAST
Voice-Over-IP (VOIP) Ready

DATA

HSDPA/HSUPA data rate: DL-3.6/7.2/14.4 Mbps
UL- 2.0/5.76 Mbps

UMTS data rates: DL and UL Max 384 kbps

Bluetooth®: Class III & IV v2.1

USB v2.0 (miniUSB) High Speed - Host & Client

INTRINSIC SAFETY CERTIFICATIONS

Underwriter Laboratories UL 913 - Class 1 Division 1 Rating
ATEX Zone 1
IECEX Zone 1 (World Certification)
Canadian Standards Authority CSA-C22.2 No. 157-92

NETWORK-INDEPENDENT GPS

Integrated standalone with A-GPS
2 Meter or better Accuracy
6 Second or better Time-To-First-Fix
Hybrid GPS/SBAS engine (WAAS, EGNOS, MSAS)
20K real-time correlations
Variable-length integration for superior performance
-162dBm for deep-indoor & poor GPS signal
-148dBm from cold start
<1.5µW standby power
Anti-jamming technology
Extra-low power consumption/location fix

INTRINSICALLY SAFE CAMERA

Type: 3.2 megapixel color
Focus: Autofocus
Video: up to 30 FPS
Resident Data Capture: Photo, Video, 2D/1D Barcode

DATA CAPTURE (Optional)

Barcode: Common Linear Codes and Other Linear Codes
Postal Codes
2D and Stacked Linear Codes
Optical Character Recognition Fonts
RFID: Low Frequency 125 - 134.2 kHz tags
High Frequency 13.56 MHz tags
Ultra High Frequency 860-960 MHz tags
HID eProx
Smartcards: Read and Write Capable
Memory Cards, Processor Cards, Proximity Cards
Biometric Scanner: FIPS compliant capture of fingerprint data
Zigbee Wireless: Standard Zigbee firmware or Customized Zigbee Firmware
Dex: Serial I/O connectivity - RS232 (custom formats available)

WARRANTY

Standard 1 year warranty against defects in workmanship and materials from date of shipment for unmodified devices operated under normal/proper conditions.

Extended 3 Year Warranty Available.

Premium Service Available.

OPTIONAL ACCESSORIES

Charging - International plugs, Car Chargers, USB
Vehicle Mounts
Silicon Jackets, Holster Cases, Spare Batteries, Spare Stylus

OPTIONAL SERVICES

GroupLocate™
GroupCommand™
eButton™ - Emergency Response Service
Mapping Client Application with Group View
Remote Upgrade with On-The-Fly Update
Web-Based Device Management
Situational Awareness System™
Push-To-Talk: OMA PoC PTT Private Client
AES 256 Encryption
Language Packs

