Sierra

G60 Mobile Inspection Assistant

THE WORLD'S FIRST
3-IN-1 INDUSTRIAL HANDHELD

ATEX

- THERMAL IMAGER
- PUSH-TO-TALK RADIO
- RUGGED SMARTPHONE

Now

Explosion Proof   Contact-Less   Accuracy

G60
- Smartphone
- Push-to-talk
- Thermal Imager
- Digitized Notes

Past   Workers are less agile and efficient when fully equipped.

Walkie-Talkie   Pen & Paper Notes   Smartphone   Thermal Detector

System

CPU	MediaTek MT8768 Octa-core (4x Cortex A53 2.0GHz / 4x Cortex A53 1.5GHz)
OS	Android 11 (GMS)
Memory	4GB
Storage	64GB
Micro SD	Support SDIO 3.0 Protocol (up to 128GB)

WWAN

WLAN/WiFi	802.11 a/b/g/n/ac
Bluetooth	Class 1, Bluetooth v5.0, (BLE)
GPS/AGPS	GPS/Beidou/GLONASS (Band 900/1800;33dBm)
Wireless	UMTS/HSPA+ Primary FDD-LTE:1/2/3/4/5/7/8/12/17/19/20/28/ TD-LTE: 40

Peripherals and Devices

Camera	Front: 5M with FF, Rear: 13M OIS with AF
Audio	Vibrator, Receiver / Speaker, Mic, Headphone Jack
Flash	Yes
SIM	2 x Micro Sim
Torch	Yes
OTG	Yes
PTT	YES (Maximum distance around 5KM)
RFID	NFC Embedded(ISO 14443 Type A/B and ISO 15693)
NFC	Yes
Aimer	Yes
Thermal	80 x 60 Pixel Scene Dynamic range:-10°C ~ 140°C Radiometric Accuracy: Greater of ±5°C or 5% (Typical)

* The thermal imager is to detect the temperature difference between the target and the surroundings. The temperatures are for reference only.

I/O Interface

Cradle Interface	VIN 9V/USB D-/USB D+/GND/5V OUT/UART TX/ UART RX/ADC/USB ID/GND
Key	Power/+/-/SOS/UD1/UD2/UL/REC/CAM/PTT

LCD Display

Size/Type	5"HD TFT
Resolution	720 (W) x 1280 (H)
Brightness (cd/m²)	500cd/m^2 (with TP) 25% Default
Touch Screen	5 Points Capacitive Touch (PCT)

Power Supply

Battery Capacity	5100mAh
Charging Time	Up to 4hours
Cruising Endurability	8~10hrs

Mechanical & Environmental

Operating Temperature	-10°C ~ 55°C
Storage Temperature	-20°C ~ 65°C
Dimensions(mm)	181.7(H)x87.2(W)x30.9(D)mm 274.7(H)x87.2(W)x30.9(D)mm(with antenna)
Weight	531g
IP Rating	IP67
Drop	1.5m

Certification of Explosion Protection

Certification	CE; ATEX ic IIC T5 Gc

1	Push-to-Talk key	9	Upload key	17 Laser pointer
2	SOS key	10	Microphone & PTT speaker	18 Thermal camera
3	PTT antenna	11	USB interface pogo pin	19 Strap hanger (Optional)
4	Speaker & PTT microphone	12	Volume key	20 Expansion slot (Optional)
5	Front camera	13	Power key	21 NFC reader
6	Customizable key1	14	Camera key	22 Quick release screw
7	Record	15	Hook holder	
8	Customizable key2	16	Rear camera	

Ordering Information

Part No.	Description
7400600203001M	G60 Mobile Inspection Assistant integrated with the thermal imager, push-to-talk, and smartphone

Packing Information

Part No.	Item	Description	Q'ty
691000600000M	USB Cable	Data and Charger Cable	1
2214038519000P	Rechargeable Li-ion Battery	Typical 3.8V, 5100mAh	1

Optional Accessories

Part No.	Item	Description	Q'ty
2214038519000P	Rechargeable Li-ion Battery	Typical 3.8V, 5100mAh	1
7405000710007M	Charging Cradle	Input: 12V/2A Output: Phone DC 9V/2A Battery DC 4.35V/2A	1
5490101150000M	Adapter	Input:100-240V~50/60Hz 0.8A Max Output:12V/2A	1
3432122000780P	Micro USB Cable	1m	1
6900005000050M	Hand Strap	132(L) x 26.5(W) mm Customized	1

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G60 Pro
Push-to-Talk (PTT) & Thermal Inspection Device for Hazardous-Area

Product Overview

The **G60 Pro** is a **purpose-built hazardous-area field device** that combines **mission-critical Push-to-Talk (PTT) communication** with **integrated thermal inspection** on a single **intrinsically safe, ATEX/IECEx-certified platform**.

It enables industrial teams to **communicate instantly** and **identify thermal anomalies early**—directly inside classified environments where conventional radios, smartphones, and thermal cameras are not permitted.

Thermal Imaging for Hazardous Areas

Integrated Thermal Inspection

The G60 Pro integrates a **built-in thermal imaging camera**, enabling **non-contact temperature measurement** and **early fault detection** directly inside hazardous areas—without the need for additional Ex-certified devices.

Early Anomaly Detection

Thermal imaging enables rapid identification of:
- Overheating electrical panels, MCCs, and cable terminations
- Hot bearings, motors, and rotating equipment
- Abnormal heat patterns in pumps, valves, and flanges

This supports **predictive and preventive maintenance**, reducing unplanned downtime and safety incidents.

Visual & Thermal Documentation

- Capture thermal images and videos in classified zones
- Combine visual and thermal evidence for faster diagnosis
- Support maintenance records, audits, and investigations

THERMAL IMAGING APPLICATIONS FOR HAZARDOUS AREAS (ATEX ZONE 2)
Non-contact thermal inspection using intrinsically safe mobile devices

Reactor Temperature Monitoring

Motor Overheating Detection

Pump & Bearing Overheating

Valves & Flanges Overheating

Valves & Flanges Overheating

Cable Trays & Electrical Panels

ATEX SIERRA Ex

FIRE & HEAT Anomaly Protection

Push-to-Talk (PTT) Communication

Instant One-Touch Communication

Engineered for **instant** communication in hazardous environments, the G60 Pro features a **dedicated hardware** Push-to-Talk button for point-to-point or group calls.

1 Dedicated PTT Button
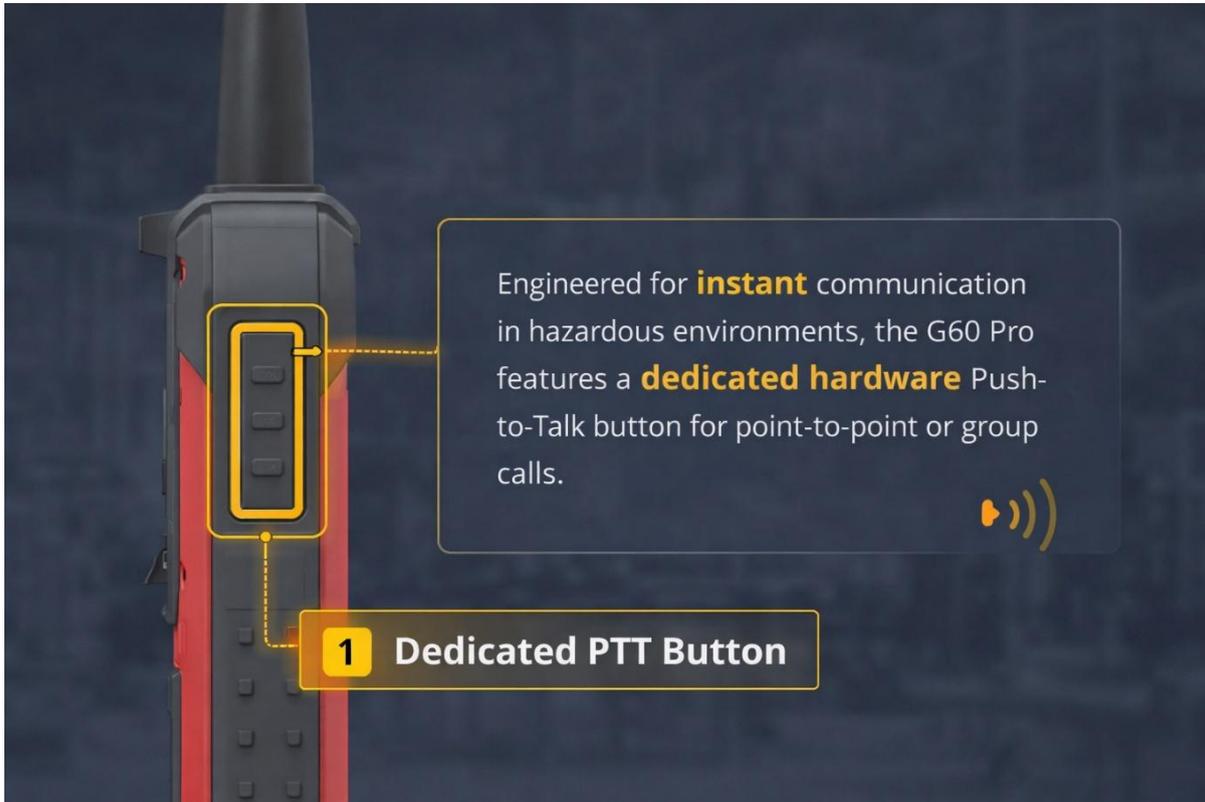
The G60 Pro features a **dedicated hardware PTT button**, enabling immediate voice communication without dialing or call setup delays. Designed for **glove and PPE operation**, it ensures reliable communication in **high-noise, safety-critical environments**.

Direct Mode Operation (DMO) – Network-Independent PTT

With built-in **Direct Mode Operation (DMO)**, the G60 Pro enables **device-to-device Push-to-Talk communication** without reliance on cellular or Wi-Fi networks.

- Automatic DMO activation at startup
- **Up to 5 km communication range** (line-of-sight)
- Reliable operation during network outages, remote operations, and emergencies

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Group & Broadcast Communication
The G60 Pro supports **individual, group, and broadcast PTT calls**, enabling real-time coordination across field teams, maintenance crews, supervisors, and emergency responders.

PTT Applications

- Field operations and operator rounds
- Permit-to-work execution and maintenance coordination
- Shutdowns and turnarounds
- Emergency response and incident escalation
- Lone-worker communication and safety

G60 Pro Technical Specifications

Category	Specification	Why It Matters
Push-to-Talk (PTT)	**Dedicated hardware PTT button**	Instant, glove-friendly communication without dialing
Direct Mode Operation (DMO)	**Device-to-device PTT up to 5 km**	Ensures communication without network dependency
Group Communication	**Individual, group & broadcast PTT**	Enables one-to-many coordination and emergency alerts
Thermal Imaging	**Integrated thermal camera (80 × 60)**	Detects overheating assets inside hazardous zones
Hazardous-Area Compliance	**ATEX / IECEx certified, intrinsically safe**	Safe operation in explosive gas and dust environments

Hazardous-Area Compliance
The G60 Pro is **ATEX / IECEx certified**, ensuring safe operation in explosive atmospheres. Its intrinsically safe architecture enables **digital communication and thermal inspection inside hazardous zones**—without compromising safety or regulatory compliance.

Why G60 Pro
- Combines **PTT communication and thermal inspection** in one certified device
- Eliminates the need for multiple Ex-certified tools
- Enables faster decisions, safer operations, and reduced downtime
- Designed specifically for safety-critical industrial environments

G60 Pro replaces radios and standalone thermal cameras by delivering instant Push-to-Talk communication and thermal inspection on a single hazardous-area platform.