



WORKER-SAFETY WEARABLE

4G Smart Safety Watch W300G

A rugged 4G Cat.1 safety watch that sends heart rate, SpO₂, body temperature, SOS, fall and location data straight to the New Forward SSSS smart site-safety platform — no receiver gateway to install. A built-in speaker and vibration bring alerts and supervisor messages right to the wrist.

4G Cat.1	Direct to the cloud — no receiver gateway
5-7 days	Typical battery life at 10-minute reporting
IP67	Industrial body, sealed against water and dust
51 g	47 × 56 × 13 mm · 1.3" colour touch screen



Built-in speaker



Vitals on the wrist

Heart rate, SpO₂ and body temperature with threshold alerts



SOS & fall alerts

One-press SOS; fall detection with remotely set sensitivity



4G — no gateway

Reports over the mobile network, site-wide and beyond



Speaker + vibration

Audible prompts and spoken read-out of messages

WHERE IT'S USED

Construction sites

Lone & night work

Heat-stress work

Factories & plants

Ports & logistics

Maintenance crews

— HOW IT WORKS

From the wrist to the supervisor – over 4G

Each worker wears a W300G. It measures vital signs, detects SOS presses, falls and removal, and fixes its position by satellite with Wi-Fi assistance. Everything goes over 4G Cat.1 straight to the New Forward SSSS platform — no receiver gateway, cabling or site power to install. Supervisors are alerted in real time and can send messages and settings back to the watch.



STEP 01



Wear

Each watch is bound to a named worker on the platform; wear detection knows when it is on the wrist.

STEP 02



Sense

Heart rate, SpO₂ and body temperature on a schedule; SOS, falls and removal the moment they happen.

STEP 03



Report

4G Cat.1 carries the data to the cloud; readings taken out of coverage are stored and sent later.

STEP 04



Respond

Supervisors are alerted on the web, by Web Push and by email, and can message the worker's watch.

— WHERE IT'S USED



Construction sites

Front-line worker vitals and SOS



Lone & night work

SOS and fall cover when working alone



Heat-stress work

Body-temperature and heart-rate alerts



Factories & plants

Site-wide cover without gateways



Ports & logistics

Large outdoor areas, live positions



Maintenance crews

Mobile teams moving between sites

The outcome

A safety net that travels with each worker wherever there is mobile coverage — with no receiver gateways to install, power or move as the site changes.



Nothing to install on site

— THE HARDWARE

W300G: a rugged 4G watch with a built-in speaker

An industrial-grade watch with an IP67-sealed body and a protected touch screen, built around a low-power 4G Cat.1 module and a high-accuracy optical health sensor. The W300G is the speaker-equipped model of the W300 family.



Key features

- Heart rate & SpO₂**
High-accuracy Goodix optical sensor
- One-press SOS**
Long-press to send, again to cancel
- Built-in speaker**
Audible prompts, spoken messages
- Satellite + Wi-Fi positioning**
GPS / BeiDou, Wi-Fi and cell assisted
- 580 mAh battery**
Typically 5–7 days at 10-min reporting
- Body temperature**
Temperature module, ±0.2 °C
- Fall detection**
5 sensitivity levels, 0.5–2.5 m height
- Messages on the wrist**
1.3" colour touch screen + vibration
- Wear detection**
Removal alert; standby off the wrist
- IP67 industrial build**
Sealed against water and dust

RECHARGE KIT & ACCESSORIES

Charging case (option)

- Carry case charges 16 or 32 watches at once
- Suits shift handover at the site office
- Smart charging locker also available

Standard kit

- W300G with 22 mm silicone strap
- Magnetic USB charging cable, about 2 h to full
- User manual; 5 V / 1 A adapter optional

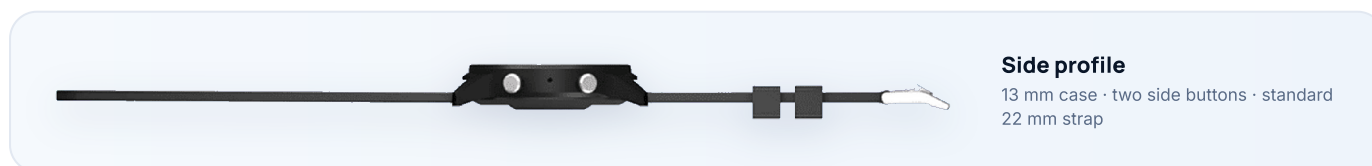
Strap options

- Breathable hook-and-loop strap
- Magnetic anti-removal strap
- Strap with built-in RFID tag

WHY W300G



The model with sound: the W300 family shares one body. The W300G adds a built-in speaker for audible prompts; the larger-battery W300PG (760 mAh) has no speaker. UWB, LoRa and Wi-Fi variants are available for special projects.



Side profile

13 mm case · two side buttons · standard 22 mm strap

Note: Product images supplied by the manufacturer, for illustration only; the on-screen watch face and strap colour of shipped units may differ.

Every reading on one platform – and back to the wrist

W300G watches connect directly to SSSS, New Forward's own smart site-safety platform, alongside AI cameras, digital permits-to-work and other site systems. Supervisors see every worker's status in one place and act on it.

Live map & status

- Latest position of every worker
- Battery, online / offline, worn or not
- Per company and site, tiered access

Vitals & thresholds

- Heart rate, SpO2, body temperature
- Threshold alerts per worker group
- History and trend views

SOS, fall & removal

- Alert centre with acknowledgement
- Web Push and email notifications
- Escalation if an SOS is left unhandled

Geofences & tracks

- Polygon zones drawn on the map
- Zone entry and exit alerts
- Track playback with CSV export

Remote settings

- Fall sensitivity and trigger height
- Reporting interval and GPS mode
- One command to up to 200 watches

Messages to the wrist

- Text one worker or a whole team
- Shown on screen with vibration
- Read out by the W300G speaker

New Forward SSSS · Smart watches

Online 18 / 20Message all

Worker	Status	Heart rate	SpO2	Body temp	Battery	Reported
Worker 01	Normal	76 bpm	98%	36.4 °C	82%	1 min ago
Worker 07	SOS	104 bpm	97%	36.9 °C	64%	just now
Worker 09	HR high	128 bpm	96%	37.6 °C	71%	1 min ago
Worker 04	FALL	97 bpm	98%	36.6 °C	55%	3 min ago
Worker 12	Not worn	—	—	—	90%	8 min ago
Worker 15	Low batt.	81 bpm	99%	36.2 °C	12%	1 min ago
Worker 18	Normal	72 bpm	98%	36.3 °C	77%	3 min ago

Alerts

SOSWorker 07 pressed SOS10:32

FALLWorker 04 fall detected10:18

HRWorker 09 heart rate 128 bpm (limit 120)10:05

Message to watches

To: Team A · 8 watches

Heat warning: take a 15-minute break in the shade and drink water.

Read out on the W300G speaker

Send

Platform screen for illustration (not an actual screenshot; workers shown by code)

4G WATCH OR BLUETOOTH GATEWAY?

	W300G – 4G direct	Bluetooth watch + receiver gateway
Site installation	None — each watch connects over 4G	Gateways installed and powered for each coverage zone
Coverage	Anywhere with 4G mobile signal	Within each gateway's radio range; more gateways for larger sites
Location on the map	Satellite and Wi-Fi position	Nearest gateway or zone
Sites that move	Nothing to relocate	Gateways re-sited as the work moves
Running cost	A data SIM per watch	A data SIM per gateway
No mobile coverage	Readings stored and sent later — alerts delayed	Better suited — gateway near the work area

Choosing: for open, spread-out or moving sites the W300G is the simpler choice. For deep basements, shafts and other spaces with no mobile coverage, New Forward can also supply a gateway-based Bluetooth system — we recommend a short coverage check before deciding.

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Specifications, supply & support

W300G smart watch

Model	W300G — 4G Cat.1, with speaker
Size / weight	47 × 56 × 13 mm · 51 g
Display	1.3" round colour TFT, 240 × 240, capacitive touch
Controls & alerts	2 buttons · vibration motor · speaker
Network	4G Cat.1 (LTE FDD / TDD), regional band version
SIM	Embedded chip SIM; data plan per region
Positioning	GPS / BeiDou + Wi-Fi + cell (LBS) + BLE 5.1
Health sensing	Heart rate, SpO ₂ , body temperature, steps, sleep
Alarms	SOS, fall, removed, low battery, power-off
Battery	580 mAh Li-ion polymer · about 2 h to charge
Runtime	Typ. 5–7 days at 10-min reporting; 10+ days standby
Protection	IP67 · Ex ib IIC T4 Gb (manufacturer rating)
Operating temp.	–10 °C to +60 °C

Platform, charging & options

Platform	New Forward SSSS (web) · Web Push · email
Platform alerts	SOS, fall, removed, low battery; heart-rate, SpO ₂ and temperature thresholds
Mapping	Live map, polygon geofences, entry / exit alerts, track playback
Remote settings	Fall sensitivity (5 levels) and height (0.5–2.5 m), reporting interval, thresholds, messages
Out of coverage	Readings stored on the watch, sent when 4G returns
Firmware	Upgradable via Bluetooth; over-the-air per project
Standard kit	Watch, magnetic USB charging cable, manual
Charging options	5 V / 1 A adapter; carry case for 16 or 32 watches; smart charging locker
Straps	22 mm silicone (standard); hook-and-loop, anti-removal, RFID tag (option)
Watch language	English · Traditional / Simplified Chinese

ONE-STOP SUPPLY & SUPPORT



Survey & planning

Check 4G coverage across the work areas; plan watch allocation, worker groups and alert recipients.



Set-up & training

Bind watches to workers, set thresholds and geofences, and train supervisors and workers on site.



Maintenance & support

Device health checks, settings and firmware updates, repair or replacement under contract.

Why New Forward



Licensed security company

Hong Kong Security Company Licence No. 2327 — one-stop supply, installation and maintenance.



Our own smart-site platform

W300-series watches already report into SSSS on Hong Kong sites, alongside AI cameras and digital permits-to-work.



One point of responsibility

From survey, supply and set-up to training and maintenance, one team follows through.

Planning a trial?

Start with a few watches: we set up the platform, bind the watches and train your team on site, then scale up when you are ready.



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