

**DuraFon-UHF-HC Handset**

## DuraFon-UHF-HC Dual-Mode Radio Phone

### Long-Range Cordless Phone and UHF 2-Way Radio Handset

The dual-mode radio phone, **DuraFon-UHF-HC** Handset is the industry's only durable, long-range cordless phone with a UHF 2-way radio that allows communication with both UHF 2-way radios and phone users. The DuraFon-UHF-HC Handset works with a DuraFon PRO Base Unit (purchase separately) to provide the telephone line connection. It's ideal for employees that need to make and receive calls and want the added convenience of communicating with other personnel using UHF 2-way radios in the area.

### Ideal Users:

Benefiting from the dual function of phone and UHF 2-way radio, the DuraFon-UHF-HC Handset is an exceptional device for these environments and users:

- > Retail / Grocery Stores (Managers, Cashiers, Loss Prevention)
- > Restaurants (Hostesses, Managers, Cashiers)
- > Hotels / Motels (Managers, Front Desk Staff, Bell Hops, Security)
- > Schools (Administrators, Safety Monitors, Coaches)
- > Theaters (Security, Managers, Customer Service)
- > Family Entertainment Centers (Managers, Security)
- > Warehouses / Mfgs (Managers, Leads)
- > Event Venues (Event Coordinators, Managers, Directors)
- > Religious Venues (Coordinators, Assistants)



## Benefits & Features:

### > On-Premises Mobility for Managers and Staff

- Exceptional Coverage of Up to:
  - 250,000 sq. ft. (Retail/Warehouse)
  - 12 Floors of Penetration (In-Building)
  - 3,000 Acres (Open Land)

### > Single Handset for Communication Flexibility

- No Need to Carry Both a Phone and a 2-Way Radio, a Single Handset Offers:
  - UHF 2-Way Radio
  - Long-Range Cordless Phone
  - Private Intercom between DuraFon Base Registered Handsets

### > Easy Integration and Deployment

- Compatible with:
  - Motorola CLS / CLP UHF Radios
  - Analog Phone Lines or PBX Ports

### > Durable and Reliable Handset

- Handset is Ready for Demanding Environments:
  - Drop-Tested
  - IP55 Ingress Protection Rated
  - FCC Certified
  - 1 Year Factory Limited Warranty

## Itemized Features and Functionality

- UHF 2-Way Radio Function
- 902~928MHz Telephone Function
- Push-to-Talk (PTT)
- Phone Book: 90 Entries
- Soft Menu Key
- H/S Speakerphone
- Broadcast
- Intercom
- Key Guard
- 3 Call Log Types
- 4-Line LCD Display
- Call-on-Hold
- Rapid Charging
- Mute
- Call Manager
- Any Key Answer
- Feature Call: 10
- Adjustable Flash Time
- 2.5mm Headset Jack
- Ringer/Vibrator

## Flexible, Dual-Mode Radio Phone Communications

### DuraFon Telephone

The DuraFon-UHF-HC Handset offers long-range cordless telephone communications to make and receive both internal and external calls through a DuraFon PRO Base Unit (purchased separately).

### DuraFon Exclusive Private Intercom

The DuraFon-UHF-HC Handset provides private handset-to-handset communications independent of the Base Unit to another specific DuraFon Handset.

### DuraFon Exclusive Group Broadcast

DuraFon-UHF-HC Handsets have the ability to broadcast to other DuraFon Handsets that have joined a communication group.

### 2-Way Radio UHF Broadcast

DuraFon-UHF-HC Handset offers "Push-to-Talk" through the Handset's Broadcast button, allowing users to instantly broadcast to all Motorola CLS / CLP and DuraFon-UHF-HC Handset users.



## Flexible, Multi-Mode Communications

### Durable, Ruggedized Design

The DuraFon-UHF-HC durable, rugged Handset is designed for use in harsh environments and is IP55-rated for protection against dust and water. Tested to withstand 4-foot drops over 50 consecutive times onto concrete floors, the proven durability of EnGenius DuraFon Handsets ensure the phones will survive in the most challenging environments even when subjected to drops and shocks.

### Superior Long-Range Performance

DuraFon-UHF-HC implements a high-powered 900 MHz proprietary air protocol, with high RF transmission and sensitivity to provide superior range and coverage for the industrial market; covering up to 250,000 sq. ft. indoors, 3,000 acres outdoors and penetrating up to 12 floors.

### Highly Secure

Adopting 900 MHz (902~928 MHz) FHSS (Frequency Hopping Spread Spectrum) technology, the DuraFon-UHF-HC ensures a high level of privacy during conversations.

### Single Cell Technology Minimizes Equipment Needs, Saves Money

Designed to simplify deployment, the DuraFon-UHF-HC features single cell technology that leverages a single 900 MHz Base Station for long-range coverage, eliminating the need for added Base Stations or repeaters, helping companies lower their capital expenses through faster deployment.

### 10-Years of Trusted Reliability

The DuraFon-UHF-HC shares the trusted, proven durability of the popular DuraFon Series with over 10 years of continued innovation and testing that ensures the Handsets will survive in even the most challenging environments.

### Operates Independently of Wi-Fi Networks

DuraFon-UHF-HC avoids adding traffic over Wi-Fi networks, which means there's no need to worry about roaming or QoS issues that are typical with voice communications on a WLAN.

## DuraFon-UHF-HC Handset Features

<b>Long-Range</b>
250,000 sq. ft. of Retail / Warehouse Coverage
12 Floors in Building Penetration
3,000 Acres of Open Land Coverage
<b>Durable</b>
Tested to Withstand 4-Foot Drops, Over 50 Times onto Concrete Floors
IP55-Rated
<b>Handset Features</b>
Telephone
2-Way Radio (UHF Broadcast for Use with Motorola CLS / CLP)
2-Way Radio (Intercom / Broadcast for Use with DuraFon PRO)
User Handset Naming
Keypad Lock
Speakerphone
Caller ID
Call Waiting
Vibrate Mode
Line Select
2.5 mm Headset Jack
Call Logs – Dialed & Received
Redial
Speed Dial

<b>Handset Features</b> continued
Call Hold
Call Transfer
Wireless PBX Function Sharing
Wireless Phone Book Sharing
Silent Ring
Mute
900 MHz, DSS, Frequency Hopping
Selectable Handset Grouping (7 groups)
User Programmable PBX Functions
Phone Book Supports 90 Entries
Intercom (Handset-to-Handset), No Group Chatter
PTT Broadcast (One-to-Many)
<b>Battery &amp; Charger</b>
Li-Ion Technology
6-Hours of Talk Time
50-Hours of Stand-By Time
Handset & Spare Battery Charging Slots
4-Hour Recharge Time
Battery Hot-Swap While Call is On-Hold
<b>Optional Equipment</b>
DuraPouch Phone Case

## DuraFon-UHF-HC Handset Features continued

DuraFon-UHF-HC Handset Value	
No Monthly Bill (like Cellular)	
No Per Minute Charges (like Cellular)	
No Contracts (like Cellular)	
No Extensive Infrastructure Installation (like Wireless Networking, Wi-Fi Phones)	
No Wi-Fi Resource Demands	

Manufacturer's Part Numbers	
DuraFon-UHF-HC	
UPC: 6 55216 00797 0	

## Technical Specifications Cordless Phone

Electrical Specifications	Portable Handset
Frequency	902-928 MHz (Phone Mode)
RF Power	Peak: 800 mW / Average: 100 mW (Phone Mode)
Channel Spacing	200 kHz (Phone Mode)
Modulation	MSK (Phone Mode)
Multiple Access	Frequency Hopping TDMA (Phone Mode)
Frequency Hopping Rate	100 per second (Phone Mode)
TDMA Frame Length	10 ms (Phone Mode)
Number of Slots/Frame	8 (Phone Mode)
Number of Users/Carrier	4 (Phone Mode)
Receiver Sensitivity	< -109 dBm (@ BER 10-2) (Phone Mode)
Antenna Connector	Non-Standard
Antenna Gain	0 dBi
Speech Coding	8 kbps G.729A

Electrical Specifications	Portable Handset
Channel Coding	8 kbps Convolutional + CRC
Transmission Data Rate	170.667 kbps
User Data Rate	128 kbps Duplex
Duplex	Time Division Duplex (TDD)
No. of System ID	65,536
Power Source	3.7V, 2300 mAh Li-ion Battery
Charger Current	850 mA
Charge Time	4 Hours (from Empty)
Regulation Compliance	FCC Part 15, Part 90
Operating Temperature	-10 – 60 °C
Storage Temperature	-10 – 70 °C
Humidity	20 – 75 %

## Technical Specifications UHF 2-Way Radio

### General Specification

Electrical Specifications	Portable Handset
Frequency Range	UHF 461- 469.5
Channel Capacity	5
Channel Bandwidth	12.5 kHz
PL Codes	38
DPL Codes	83
Range Coverage	200,000 sq. ft./ 18,580 sq. m.
Antenna Gain	2 dBi
Average Battery Life @ 5/5/90	14 Hours

### Transmitter

Electrical Specifications	Portable Handset
RF Output (Conducted into 50 Ohms)	1.0 W
Frequency Stability	< 2.0 ppm
Spurs & Harmonics	< -45 dBc
Modulation Limiting@ 12.5kHz	± 2.5kHz
Adjacent Channel Power	60dBc
Radiated Spurious Emissions@ 12.5kHz	< -20dbm
Audio Frequency Response (0.3 - 3.0 kHz)	+1 to -3 dB
Audio Distortion	< 2%

### Receiver

Electrical Specifications	Portable Handset
Sensitivity (12 dB SINAD)	-122 dBm
Adjacent Channel Selectivity@ 12.5kHz	60 dB
Intermodulation Rejection	55 dB
Spurious Response Rejection (blocking 1Mhz)	75 dB

Electrical Specifications	Portable Handset
Audio Distortion	< 5%
Radiated Spurious Emissions (< 1GHz)	< -54 dBm
Radiated Spurious Emissions (> 1GHz)	< -52 dBm
Audio Output @ <5% Distortion	0.5W @ 8 ohms

## Device, Packaging Dimensions & Weights:

<b>DuraFon-UHF-HC Handset</b>
Net weight: 0.56 lbs. (257g) (Including Battery)
Handset dimension: 5.59" x 2.36" x 1.49" (142 mm x 60 mm x 38 mm)
<b>Packaging</b>
Weight: 1.97 lbs. (895 g)
Width: 7.55" (192 mm)
Length: 11.49" (292 mm)
Height: 2.83" (72 mm)

<b>Package Contents:</b>
• DuraFon-UHF-HC Handset
• Desktop Charger with AC/DC Adapter
• Quick Set-Up Guide
• Li-Ion Battery
<b>Limited Warranty</b>
1-Year

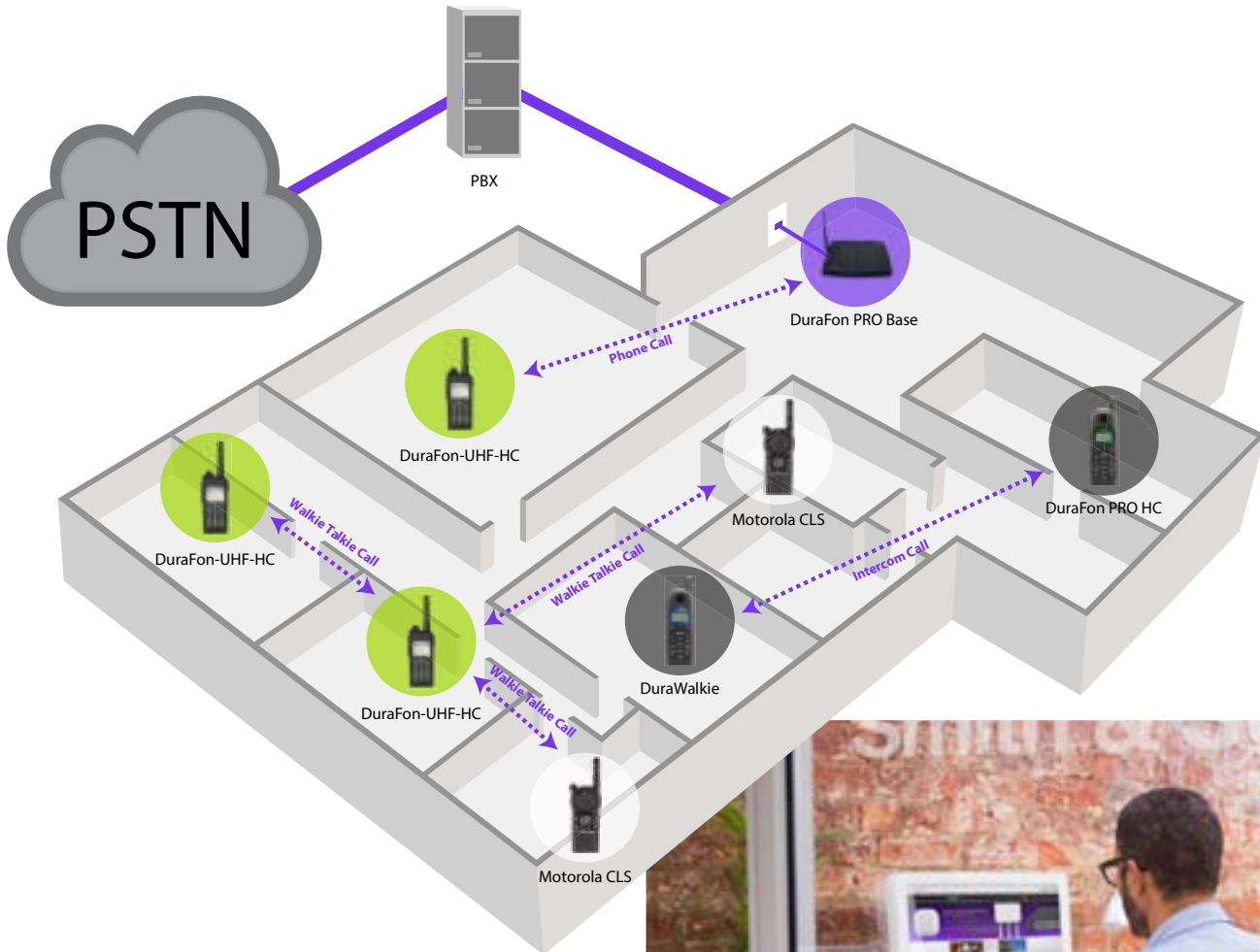
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### Note:

1. Telephone function requires Handset to be registered and linked to a DuraFon PRO Base Unit (purchased separately) that has phone line access.
2. DuraFon Exclusive Private Intercom and Exclusive Group Broadcast are features available with the DuraFon-UHF-HC, DuraFon PRO-HC and DuraWalkie Handsets.

## DuraFon-UHF-HC Application



**EnGenius Technologies** | 1580 Scenic Ave. Costa Mesa, CA 92626  
 Email: [support@engeniustech.com](mailto:support@engeniustech.com) | Phone: 888-735-7888 | Website: [engeniustech.com](http://engeniustech.com)

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Actual range can vary depending on many factors including environmental conditions, distance between handsets and base stations, radio interference in the operating environment, and mix of devices in the network. Features and specifications subject to change without notice. Motorola is a trademark of Motorola Trademark Holdings, LLC. EnGenius, DuraFon and / or DuraFon-UHF are not associated with nor endorsed by Motorola Solutions, Inc. Many other makes and models of UHF radios work with the DuraFon-UHF-HC handset. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference, the user is encouraged to try to correct the interference, see User Manual for additional information. **Base Station:** This equipment complies with FCC radiation exposure limits and should be installed and operated with minimum distance 20cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. **Handset:** This equipment complies with FCC radiation exposure limits. End users must follow the specific operating instructions for satisfying RF exposure compliance, to do this, please follow operation instruction as documented in the User Manual. This device complies with RSS-210 of the Industry Canada Rules and with IC radiation exposure limits.