



G U A R D I A N T E L E C O M

## *Product and Services Guide*

# Hazardous Area Certified Analog Telephones

Guardian's Hazardous Area phones go further by offering a full range of phone features and are designed for locations in which fire or explosion hazards may exist due to flammable gases or vapors, combustible dust, flammable liquids; or easily ignitable flyings or fibers.

All of our WRT-H and WRR-H units are standard with a stainless steel mounting plate and a conduit hub for ease of installation while other models allow for these as options.

Our Hazardous Area phones give you safety, quality, reliability, flexibility and capabilities all in one system – without compromise.

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**Telecom**

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SECTION

4



Visit industrial sites around the world and you can find telephones and communication systems designed, manufactured, distributed and commissioned by Guardian Telecom. From certified and ruggedized telephone and paging endpoints, to loudspeakers & ringers, cable, accessories, acoustic booths and much more. Our product line is extensive and our knowledge in-depth.

Guardian manufactures and assembles at our modern, ISO certified, CSA, UL and ATEX approved facility located east of the Canadian Rockies in Calgary, Alberta, Canada.

Working closely with our customers has always been a cornerstone in our work ethic. It keeps us up to date on their evolving needs and requirements as they operate in a demanding and uncompromising industrial world.

Guardian Telecom has completed its initial VoIP telephone product launch. As the IP world continues to evolve and grow, we will continue to invest both time and resources in design and testing to meet the stringent requirements that clients demand.

The in-house channel-partner sales and technical teams are here to work directly with you or through our network of distributors and representatives, locally, nationally and globally. Take advantage of their practical experience and product knowledge to make informed decisions based on your communication needs, environmental factors, regulatory requirements, budget considerations, growth and scheduling.

From individual telephone units to complete systems, our focus on customers' distinct needs is also addressed by customizing products whenever practical. From features to colors, finishes to labels, graphics, parts, enclosures and more.

Guardian can help guide you through the product selection process no matter how complex it is. We invite you to contact us to discuss your needs and see if our products & services will be the right fit.



Toll free (North America) 1 800 363-8010 Tel 403 258-3100 Fax 403 253-4967 E-mail [info@guardiantelecom.com](mailto:info@guardiantelecom.com)

Guardian Telecom's Product and Services Guide Catalogue is a compilation of individual Category Sections. They include an in-depth selection of Product Data Sheets from our extensive product lines including Analog and VoIP Telephones, Page/Talk, Cable, Talk/Back, PA/GA equipment, Acoustic Booths, Loudspeakers & Ringers and Accessories at the date of publication.

Based on a policy of continuous improvement, Guardian is constantly evaluating and redesigning existing models, adding new features and introducing new products to the benefit of our customers. Additional information can be found on our website at [www.guardiantelecom.com](http://www.guardiantelecom.com).

## Hazardous Area Analog Telephones



### Weather Resistant — WRT-H & WRT-HD

4-1

WRT-H Telephones are for use in Class I, Division 2 areas where gas may be present. Our WRT-HD units are certified for Class I, Division 2 areas as well as Class II Division 1 & 2 areas where metal, coal and grain dust can accumulate and be a risk.

- WRT-10-H Teleseal Keypad, Curly Handset Cord and Volume Control Handset
- WRT-20-H Membrane Keypad, Curly Handset Cord and Volume Control on Keypad
- WRT-30-H Metal Keypad, Curly Handset Cord and Volume Control Handset
- WRT-40-H Metal Keypad, Armored Handset Cord and Volume Control Handset
- WRT-10-HD Teleseal Keypad, Curly Handset Cord
- WRT-20-HD Membrane Keypad, Curly Handset Cord and Volume Control on Keypad



### Weather Resistant Ringdown — WRR-H

4-3

WRR-H Telephones are manufactured for use in Class I, Division 2 Hazardous areas. These phones are designed for rough-service areas with limited, special communication needs, assuring high quality communications under extreme working conditions. Lift the handset, and PBX programming routes the call to its assigned location.

- WRR-11-H Curly Handset Cord and Volume Control Handset
- WRR-41-H Armored Handset Cord and Volume Control Handset



### Water Tight — WTT-H & WTR-H

4-5

Designed to provide dependable service in hazardous areas. In addition to being certified for use in Class 1, Division II applications, they have a Type 4X rating which makes them ideal for use in offshore or corrosive atmospheres.

- WTT-30-H Metal Keypad and Curly Handset Cord
- WTT-40-H Metal Keypad and Armored Handset Cord
- WTR-41-H Ringdown, Armored Handset Cord



### Steel Compact — SCT-H

4-7

Reliable, high quality communications in moderately harsh environments; where standard telephones are not suitable. Ideal for noisy industrial applications.

- SCT-10-H Teleseal Keypad, Curly Handset Cord and Volume Control Handset
- SCT-20-H Membrane Keypad, and Curly Handset Cord
- SCT-30-H Metal Keypad, Curly Handset Cord and Volume Control Handset
- SCT-40-H Metal Keypad, Armored Handset Cord and Volume Control Handset



### Steel Compact Ringdown — SCR-H

4-9

As soon as the receiver is lifted the SCR-11-H or SCR-41-H automatically connects the caller to an assigned PBX location.

- SCR-11-H Teleseal Keypad, Curly Handset Cord and Volume Control Handset
- SCR-41-H Membrane Keypad, and Curly Handset Cord



### Desktop/Wall Mount — DTT-20-H

4-11

DTT-20-H Hazardous Area Industrial Desktop Telephones meets requirements for use in Class I, Division 2 areas. Non-incendive, rugged and dust & corrosion resistant.



# WRT-H/WRT-HD Series Hazardous Area Telephones



Standard  
Handset on  
all WRT-HD

WRT-10-HD  
and  
WRT-10-H

WRT-20-HD  
and  
WRT-20-H

Volume Control  
Handset on  
WRT-10-H,  
WRT-30-H &  
WRT-40-H

WRT-30-H

WRT-40-H

WRT-H for Class I, Division 2 and WRT-HD for Class I Division 2 and Class II Division 1 & 2 hazardous areas. Renowned for safety and durability, from the phones electronics to their sturdy engineered polymer enclosure. All WRT-H and WRT-HD telephones are built for demanding applications where reliability is essential.

## FEATURES and BENEFITS

- Magnetic reed hook switch to reduce parts subject to wear
- Encapsulated circuitry impervious to water and particles
- Nylon hinge to prevent jamming caused by salt or corrosion
- Spring-loaded door for automatic closure
- Surge arrestor to prevent voltage spike damage
- Heavy duty industrial handset
- Volume control to ensure communication in noisy environments (not available on WRT-10-HD model)
- Electret noise reducing microphone for clear communication
- Service temperature range from -40° to +140°F (-40° to +60°C)
- Waterproof connections & stainless steel fittings for longer life
- Compact durable enclosure with mounting plate for easy mounting
- Modular parts for easy service
- Hearing aid compatible
- Electronic ringer for reliability (HD models have a bell)
- Yellow enclosure for high visibility. Optional grey enclosure and other custom color options available
- Weather, dust & corrosion resistant
- Tone or pulse dialing for universal configuration
- Easily connected to any single line analog CO or PABX telephone line
- Powder coated, corrosion protected steel faceplate
- Front access plate for ease of hook-up

## APPLICATIONS

These telephones are designed for use in locations where the atmosphere may be hazardous due to the presence of gases, dust, or fibers such as:

- Oil Refineries
- Ammonia & Fertilizer Plants
- Paint & Varnish Manufacturing
- Chemical Plants
- Sewage Treatment Plants
- Pulp & Paper Mills
- Drilling Rigs
- Mines
- Bulk Loading Stations
- Grain Processing Facilities
- Food Processing Facilities and more . . .

## INSTALLATION and CONNECTABILITY

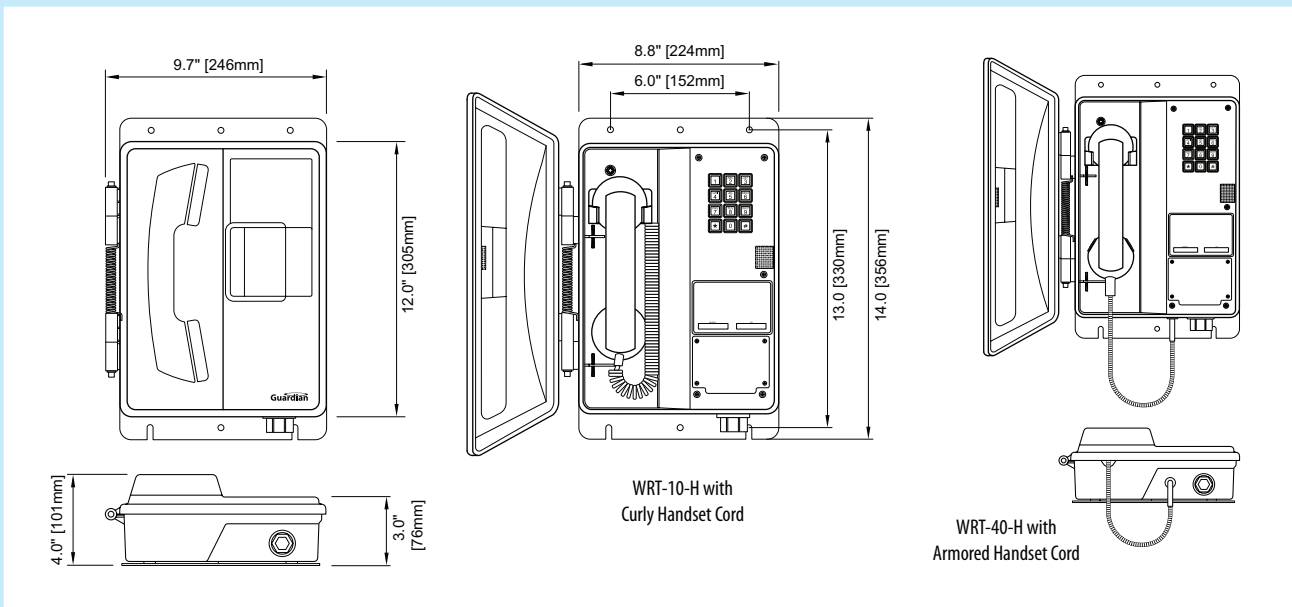
To provide flexibility and potential for growth, telephones are easily and economically connected to any telephone network by standard wiring and parts. Voice quality is unaffected when phones are connected within 15,000 feet (~4,600 meters) of a main telephone switch accepting single line telephones. Maintaining safety standards may require use of special wiring conduits or other considerations. Telephones are tone/pulse switchable. Initial settings are to tone prior to delivery (unless requested otherwise). In-service switching may require technical assistance.

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## OVERALL DIMENSIONS



WRT-H/WRT-HD Series Hazardous Area Telephones

## ENGINEERING SPECIFICATIONS

### ELECTRICAL PERFORMANCE

Audio Range Frequency Response	300 - 3400 Hz
Dialing Method	DTMF or 40/60 Pulse @10 PPS
Transmit Objective Loudness Rating (TOLR)	Nominal -38 +/- 3 dB
Receiver Volume Adjustment*	3 Steps Up / 2 Steps Down 8.1dB / 5.1 dB
*Applies to volume control handset only. – NOTE: WRT-20-H & WRT-20-HD use the non-volume control handset. Volume is controlled via the keypad.	
Receiver Objective Loudness Rating (ROLR)	Nominal 50 +/- 3 dB
– receiver volume at maximum	41.9 +/- 3 dB
– receiver volume at minimum	55.4 +/- 3 dB
Side Tone Objective Loudness Rating (SOLR)	Nominal 11 +/- 4 dB
– receiver volume at maximum	7 +/- 4 dB
– receiver volume at minimum	14 +/- 4 dB
Memory Dial Flash Mute	WRT-20-H/HD Models Only
10 Quick Dial Numbers 20 Digits Each	600 mSec Timed Disconnect
Press Key to Mute Transmitter	Between 75 and 80 dB
FCC Ringer Equivalence	WRT-H Models 0.8 B / WRT-HD Models 0.8 A
Set Impedance	600 Ohms Nominal
Maximum Loop	15Kft ( ~4,600m ) of 22 AWG Wire

### ELECTRICAL REQUIREMENTS

Ringer Sensitivity	40 -100 V, 16 - 25 Hz
Line Voltage	24 - 56 VDC
Loop Current	20 - 120 mA
Connection Method	Surge Arrestor

### MECHANICAL SPECIFICATIONS

Hook Switch ( Cradle Switch ) Life	>1 000 000 Operations
Body Construction	GE Valox 357 Engineering Polymer
Net Weight	7.0 lbs ( 3.2 kg )
Shipping Weight	8.0 lbs ( 3.7 kg )
Shipping Dimensions ( L x W x D )	15.0" x 5.0" x 11.5" ( 381 x 1127 x 293 mm )
Hand Set Construction	High impact ABS
Mounting	Vertical wall
Microphone	Noise Reducing Electret
Receiver	Hearing Aid Compatible
Hardware Material	Stainless Steel
Wiring Access	1/2" NPT Conduit Hub

### ENVIRONMENTAL

Weather Proof Enclosure	Type 3R
Temperature	-40° to +140°F ( -40° to +60°C )
Humidity	0 - 95% RH Non-Condensing
Dust & Corrosion Resistant	Full Gasket Faceplate

### COMPLIANCE

CSA ("C" and "US")	CSA 158194
WRT-10-HD, WRT-20-HD	Class I, Div. 2, Groups A, B, C and D; Class II, Div. 1 and 2, Groups E, F and G
WRT-10-H, WRT-20-H, WRT-30-H, WRT-40-H	Class I, Div. 2, Groups A, B, C and D
Industry Canada	1012-6721A
FCC	HQHCAN-22517-TE-E
– WRT-10-HD does not meet IC & FCC requirements for Volume Control	

### ORDERING INFORMATION

Warranty: One year parts and labor

Order No.	Description
P6672	WRT-10-H Teleseal Keypad/Curly Cord, Volume Control Handset
P6673	WRT-20-H Membrane Keypad/Curly Cord, Volume Control on keypad
P6675	WRT-30-H Metal Keypad/Curly Cord, Volume Control Handset
P6674	WRT-40-H Metal Keypad/Armored Cord, Volume Control Handset
P6676	WRT-10-HD Teleseal Keypad/Curly Cord
P6677	WRT-20-HD Membrane Keypad/Curly Cord

Options	Description
20C	20' (6.1m) Curly Cord for WRT-20-H
20VC	20' (6.1m) Curly Cord for WRT-30-H
20CP	20' (6.1m) Curly Cord Handset for WRT-10/20-HD
36AVC	36" (.9m) Armored Handset Cord for WRT-40-H
72AVC	72" (1.8m) Armored Handset Cord for WRT-40-H
NC	Noise Canceling Microphone
GRV	Grey Enclosure
RED	Red Enclosure
RC-WRT/WRR	Retainer Clips – must be ordered with phone (standard on WRT-40-H)

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# WRR-11-H/WRR-41-H Hazardous Area Ringdown Telephones



Volume  
Control  
Handset

WRR-11-H

WRR-41-H

## FEATURES and BENEFITS

- Magnetic reed hook switch to reduce parts subject to wear
- Encapsulated circuitry impervious to water condensation and dust
- Nylon hinge to prevent jamming caused by salt or corrosion
- Spring-loaded door for automatic closure
- Surge arrestor to prevent voltage spike damage
- Heavy duty industrial handset
- Electret noise reducing microphone for clear communication
- Service temperature range from -40° to +140°F (-40° to +60°C)
- Water proof connections & stainless steel fittings for longer life
- Compact durable enclosure with mounting plate
- Modular parts for easy service
- Hearing aid compatible
- Electronic ringer for reliability
- Yellow enclosure for high visibility. Optional grey enclosure and other custom color options available
- Weather, dust & corrosion resistant for any hazardous area application
- Easily connected to any single line analog CO or PABX telephone line
- Steel powder coated faceplate to eliminate corrosion
- Front access plate for ease of hook-up

## APPLICATIONS

These telephones are designed to provide reliable communications in environments where the atmosphere may be hazardous and subject to moisture, dust and corrosive chemicals such as:

- Oil Refineries
- Ammonia & Fertilizer Plants
- Paint & Varnish Manufacturing
- Chemical Plants
- Sewage Treatment Plants
- Pulp & Paper Mills
- Plant Entry Gates
- Drilling Rigs
- Mines
- Bulk Loading Stations
- Grain Processing Facilities
- Food Processing Facilities
- Airports
- and more ...

Guardian's WRR-H Hazardous Area Ringdown Telephones are manufactured for use in Class I, Division 2 hazardous areas. These phones are designed for rough-service areas with limited, special communication needs, assuring high quality communications under extreme working conditions. Lift the handset, and PBX programming routes the call to its assigned location.

## INSTALLATION and CONNECTABILITY

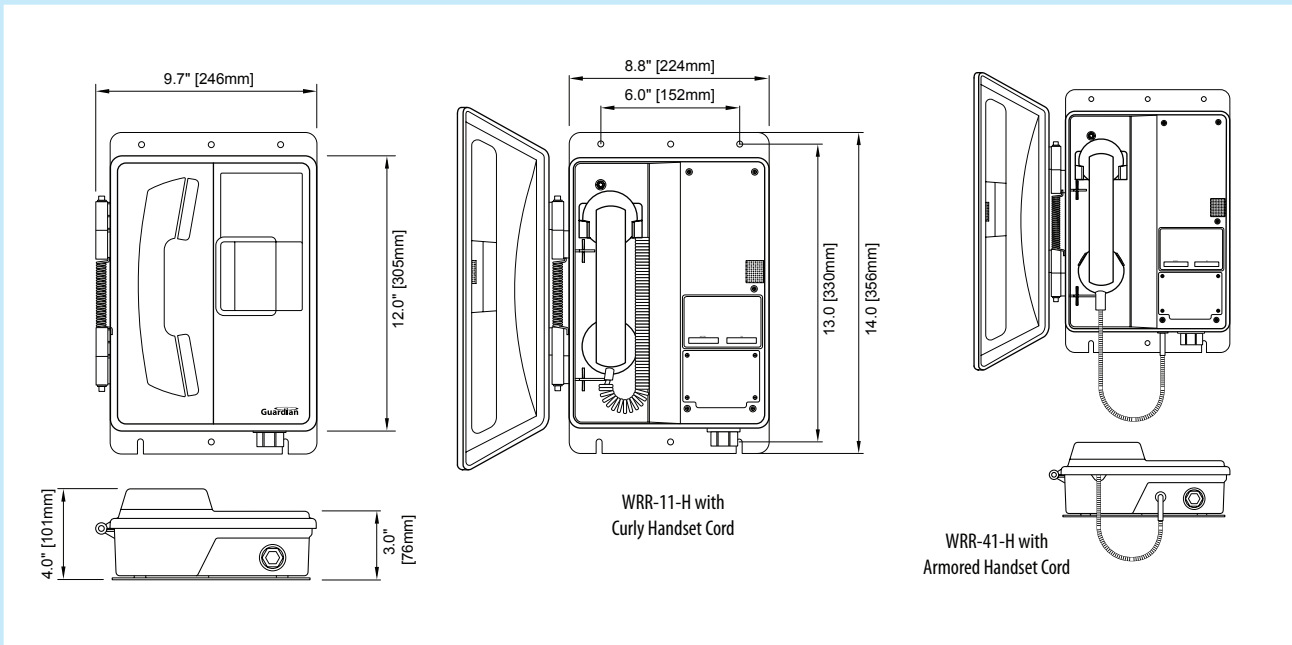
To provide flexibility and potential for growth, telephones are easily and economically connected to any telephone network by standard wiring and components. Voice quality is unaffected when phones are connected within 15,000 feet (~ 4,600 metres) of a main telephone switch accepting single line telephones. Maintaining safety standards may require use of special wiring conduits or other considerations.

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## OVERALL DIMENSIONS



WRR-11-H • WRR-41-H Hazardous Area Ringdown Telephones

## ENGINEERING SPECIFICATIONS

### ELECTRICAL PERFORMANCE

Audio Range Frequency Response	300 - 3400 Hz
Connection Method	Hotline Operation
Transmit Objective Loudness Rating (TOLR)	Nominal -38 +/- 3 dB
Receiver Volume Adjustment	3 steps up / 2 steps down 8.1dB / 5.1 dB
Receiver Objective Loudness Rating (ROLR)	Nominal 50 +/- 3 dB
- receiver volume at maximum	41.9 +/- 3 dB
- receiver volume at minimum	55.4 +/- 3 dB
Side Tone Objective Loudness Rating (SOLR)	Nominal 11 +/- 4 dB
- receiver volume at maximum	7 +/- 4 dB
- receiver volume at minimum	14 +/- 4 dB
Ringer Output	>75 dB
FCC Ringer Equivalence	0.8 B
Set Impedance	600 Ohms Nominal
Maximum Loop	15Kft (~4,600m) of 22 AWG Wire

### ELECTRICAL REQUIREMENTS

Ringer Sensitivity	40 -100 V, 16 - 25 Hz
Line Voltage	24 - 56 VDC
Loop Current	20 - 120 mA
Connection Method	Surge Arrestor

### MECHANICAL SPECIFICATIONS

Hook Switch ( Cradle Switch ) Life	> 1 000 000 operations
Body Construction	GE Valox 357 <sup>®</sup> Engineering Polymer
Net Weight (including mounting plate)	7 lbs (3.4 kg)
Shipping Weight (including mounting plate)	8.0 lbs (3.7 kg)
Shipping Dimensions ( L x W x D )	15.0" x 5.0" x 11.5" ( 381 x 127 x 293 mm )
Hand Set Construction	High Impact ABS
Mounting	Vertical Wall
Wiring Access	1/2" NPT Conduit Hub
Microphone	Noise Reducing Electret
Receiver	Hearing Aid Compatible
Hardware Material	Stainless Steel

### ENVIRONMENTAL

Weather Proof Enclosure	Type 3R
Temperature	-40° to +140°F ( -40° to +60°C )
Humidity	0 - 95% RH Non-Condensing
Corrosion Resistant	Full Gasket Faceplate

### COMPLIANCE

CSA ("C" and "US")	CSA 158194
Industry Canada	Class I, Div. 2, Groups A, B, C and D
FCC	1012-6721A
	HQHCAN - 22517 - TE - E

### ORDERING INFORMATION

Warranty: One year parts and labor

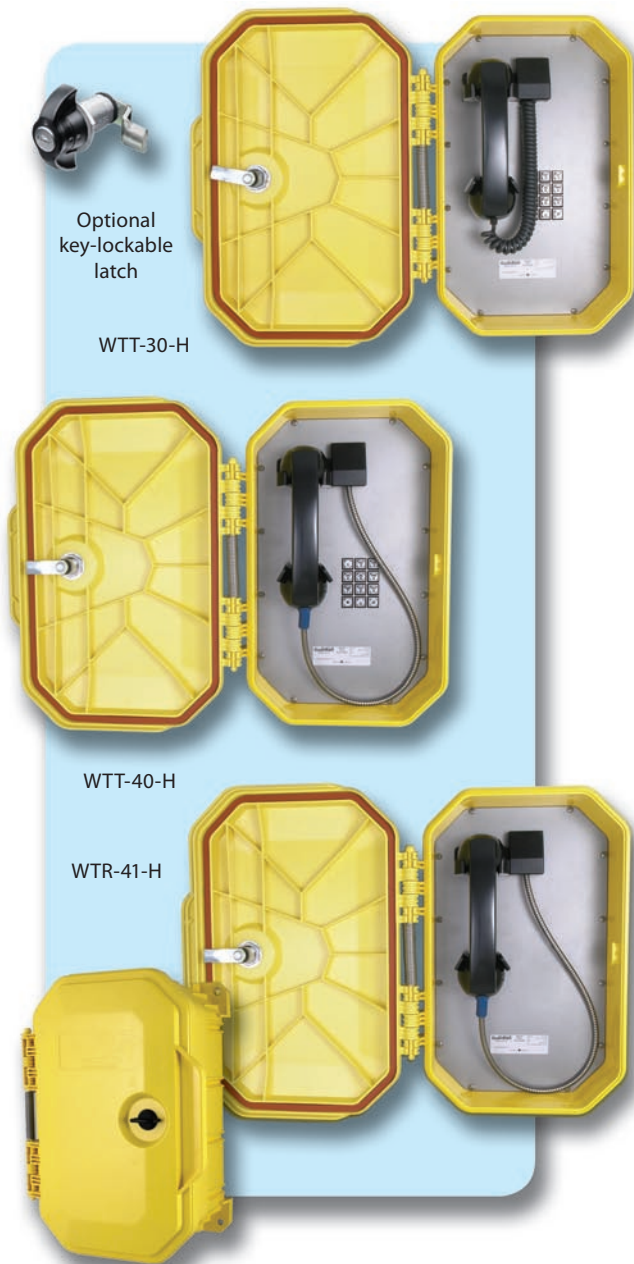
Order No.	Description
P6681	WRR-11-H Volume Control Handset/Curly Handset Cord/Mounting Plate
P6682	WRR-41-H Volume Control Handset/Armored Handset Cord/Mounting Plate
<b>Options</b>	
20VC	20' (6.1m) Curly Handset Cord for WRR-11-H
36AVC	36" (.9m) Armored Handset Cord for WRR-41-H
72AVC	72" (1.8m) Armored Handset Cord for WRR-41-H
NC	Noise Canceling Microphone
GRV	Grey Enclosure
RED	Red Enclosure
RC-WRT/WRR	Retainer Clips – must be ordered with phone (standard on WRR-41-H)

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# WTT-30-H/WTT-40-H Hazardous Area Telephones

## WTR-41-H Hazardous Area Ringdown Telephone



Optional  
key-lockable  
latch

WTT-30-H

WTT-40-H

WTR-41-H

### FEATURES and BENEFITS

- Water/dust-tight thermoplastic resin enclosure, Type 4X & IP66
- Encapsulated circuitry impervious to water and particles
- Waterproof connections & stainless steel fittings for longer life
- Corrosion protected and powder coated steel faceplate
- The WTT-30-H & WTT-40-H models feature a metal keypad for extended life
- Magnetic reed hook-switch to reduce parts subject to wear
- Surge arrestor to prevent voltage spike damage
- Vandal resistant armored handset cord with lanyard on WTT-40-H & WTR-41-H models
- Heavy duty G Type industrial handset
- Electret noise reducing microphone for clear communication
- Modular parts for easy service
- Integrated mounting feet
- Hearing aid compatible & receiver volume adjustment
- Electronic ringer for reliability
- Tone or pulse dialing for universal configuration
- Easily connects to any single line analog CO or PBX telephone line
- Lift the WTR-41-H handset and PBX programming or an optional Autodialer routes the call to its assigned location
- Handset retainers to maintain on-hook status
- Spring loaded door
- Easy support drill guides for top & bottom mount glands

### APPLICATIONS

- Refineries
- Marine Installations
- Bulk Fuel Loading Facilities
- Drilling Rigs
- Offshore Platforms
- Desert & Arctic Conditions
- Chemical Plants
- Aerospace Sites
- and more ...

### INSTALLATION and CONNECTABILITY

To provide flexibility and potential for growth, telephones are easily and economically connected to any telephone network by standard wiring and parts. Voice quality is unaffected when phones are connected within 15,000 feet (~4,600 meters) of a main telephone switch accepting single line telephones. Maintaining safety standards may require use of special wiring conduits or other considerations. Telephones are tone/pulse switchable. Initial setting is to tone prior to delivery (unless requested otherwise). In-service switching may require technical assistance.

### ACCESSORIES and OPTIONS

- Key-lockable latch
- Vandal resistant faceplate screws
- Ring Detect Relays & Off-Hook Relays
- External ringer
- Visual alerter
- Choice of enclosure colors\*
- Custom embossed logo or smooth face for label\*
- Noise cancelling microphone

Guardian's WTT-30-H & WTT-40-H Telephones and the WTR-41-H Ringdown Telephone have been designed to provide dependable service in hazardous areas. In addition to being certified for use in Class I, Division 2 applications, they have Type 4X & IP66 ratings which makes them ideal for use in offshore, dusty or corrosive atmospheres.

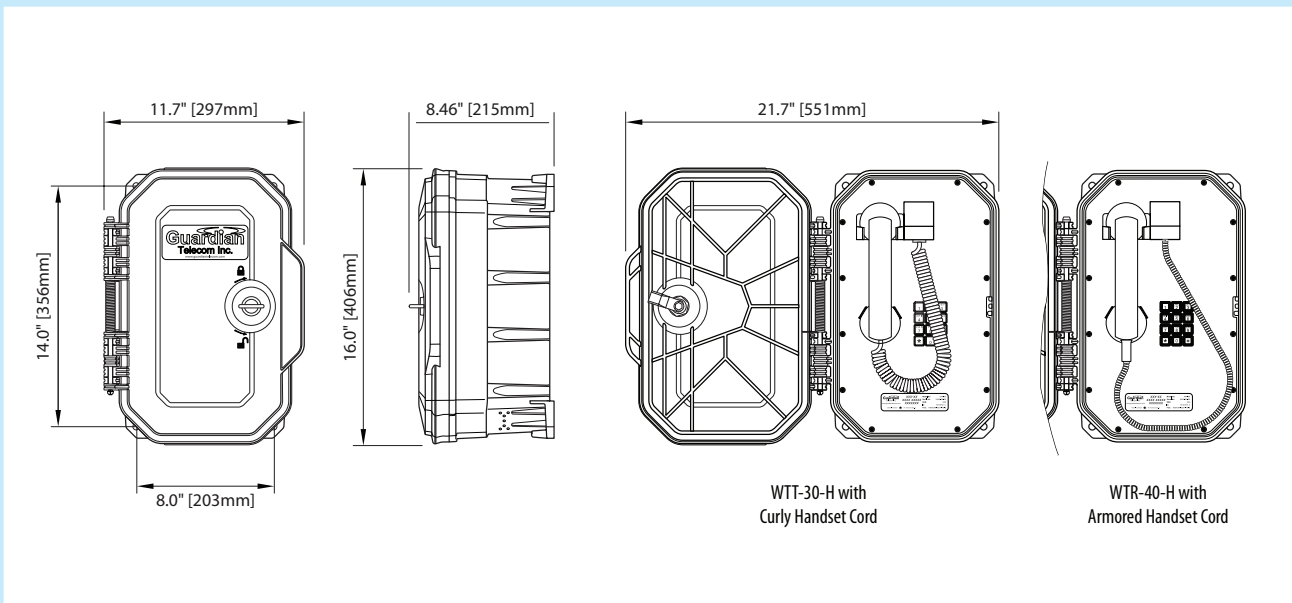
All models are housed in rugged thermoplastic resin enclosures and come with a spring loaded door latch and curly or armored hand set cord.

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## OVERALL DIMENSIONS



WTT-30-H & WTT-40-H Hazardous Area Telephones • WTR-41-H Hazardous Area Ringdown Telephone

## ENGINEERING SPECIFICATIONS

### ELECTRICAL PERFORMANCE

Audio Range Frequency Response	300 - 3400 Hz
Dialing Method (WTT-40-H)	DTMF or 40/60 Pulse @10 PPS
Transmit Objective Loudness Rating (TOLR)	Nominal -38 +/- 3 dB
Receiver Volume Adjustment	3 steps up / 2 steps down 8.1dB / 5.1 dB
Receiver Objective Loudness Rating (ROLR)	Nominal 50 +/- 3 dB
- receiver volume at maximum	41.9 +/- 3 dB
- receiver volume at minimum	55.4 +/- 3 dB
Side Tone Objective Loudness Rating (SOLR)	Nominal 11 +/- 4 dB
- receiver volume at maximum	7 +/- 4 dB
- receiver volume at minimum	14 +/- 4 dB
Ringer Output	85 dB
FCC Ringer Equivalence	0.9 B
Set Impedance	600 Ohms Nominal
Maximum Loop	15Kft ( ~4,600m ) of 22 AWG Wire

### ELECTRICAL REQUIREMENTS

Ringer Sensitivity	40 -100 V, 16 - 25 Hz
Line Voltage	24 - 56 VDC
Loop Current	20 - 120 mA
Connection Method	Fuse / Surge Arrestor

### MECHANICAL SPECIFICATIONS

Hook Switch ( Cradle Switch ) Life	>1 000 000 Operations
Body Construction	Thermoplastic Resin
Net Weight	11.8 lbs ( 5.4 kg )
Shipping Weight	14.0 lbs ( 6.3 kg )
Shipping Dimensions ( L x W x D )	20.0" x 15.0" x 12.0" ( 508 x 381 x 305 mm )
Hand Set Construction	High Impact ABS
Mounting	Vertical Wall
Microphone	Noise Reducing Electret
Receiver	Hearing Aid Compatible
Hardware Material	Stainless Steel
Connection Fittings	Up to 4 Drill Guides for Gland Support

### ENVIRONMENTAL

Water/Dust Tight Enclosure	Type 4X & IP66
Temperature	-40° to +140°F ( -40° to +60°C )
Humidity	0 - 95% RH Non-Condensing
Dust & Corrosion Resistant	Full Gasket Faceplate

### COMPLIANCE

CSA

CSA 158194  
Class I, Div. 2, Groups A, B, C and D;  
Class I, Zone 2, Group IIC, T5

### ORDERING INFORMATION

Warranty: One year parts and labor

Order No.	Description
P5304	WTT-30-H Watertight Telephone/Metal Keypad/Curly Handset Cord
P5305	WTT-40-H Watertight Telephone/Metal Keypad/Armored Handset Cord
P5306	WTR-41-H Watertight Ringdown Telephone/Armored Handset Cord

#### Options

NC	Noise Canceling Microphone
LCK-WTE	Locking Door
VR-WTE	Vandal Resistant Faceplate Screws
Choice of enclosure colors*	
Custom embossed logo or smooth face for label*	

\* minimum quantity required - consult with sales agent

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# SCT-H Series Hazardous Area Steel Compact Telephones



## FEATURES and BENEFITS

- Encapsulated circuit boards impervious to water condensation and dust
- 16 gauge, corrosion protected, steel enclosure with powder coat finish
- Heavy duty industrial volume control handset on models SCT-10-H, SCT-30-H & SCT-40-H
- Rust and corrosion resistant stainless steel hardware
- Electret noise reducing microphone
- Magnetic reed hook-switch reduces moving parts subject to wear
- Service temperature range -40° to +140°F ( -40° to +60°C )
- Surge arrester to prevent voltage spike damage
- Hearing aid compatible
- Electronic ringer for reliability
- Modular parts for easy service
- 1/2" NPT Conduit hub
- SCT-10-H – Waterproof Teleseal Keypad and Curly Cord
- SCT-20-H – Waterproof Membrane Keypad and Curly Cord
- SCT-30-H – Weather and Dust Proof Metal Keypad and Curly Cord
- SCT-40-H – Weather and Dust Proof Metal Keypad and Armored Cord

## APPLICATIONS

- Refineries
- Power Generation Facilities
- Pulp and Paper Mills
- Food Processing Plants
- Chemical Plants
- Construction Sites
- Cement Plants
- Sewage Plants
- Drilling Rigs
- Hydroelectric Facilities
- Warehouses
- Mines
- Greenhouses and more . . .

## INSTALLATION and CONNECTABILITY

To provide flexibility and the potential for growth, Guardian's SCT-H telephones can be easily and economically connected to any telephone network through standard wiring and parts. Voice quality is unaffected when phones are connected within 15,000 ft. (~ 4,600 meters) of a main telephone switch supporting single line telephones. Maintaining safety standards may require special wiring conduits or other considerations. Telephones are preset for tone operation, but are tone/pulse switchable. In-service switching may require technical assistance. Order the SCT-H separately or as part of an integrated system.

## ACCESSORIES and OPTIONS

- 20C – 20' ( 6m ) Curly cord for SCT-20-H
- 20VC – 20' ( 6m ) Curly cord, volume control handset for SCT-10-H & 30
- 36AVC & 72AVC – 36" (.9m) & 72" (1.8m) Armored handset cords for SCT-40-H
- NC – Noise canceling microphone
- RC-SCT – Retainer clips – must be ordered with phone (standard on SCT-40-H, not available on SCT-20-H)
- BP-SCT/SCR – Stainless steel back / Mounting plate
- Ring detect relay
- Off-hook detect relay

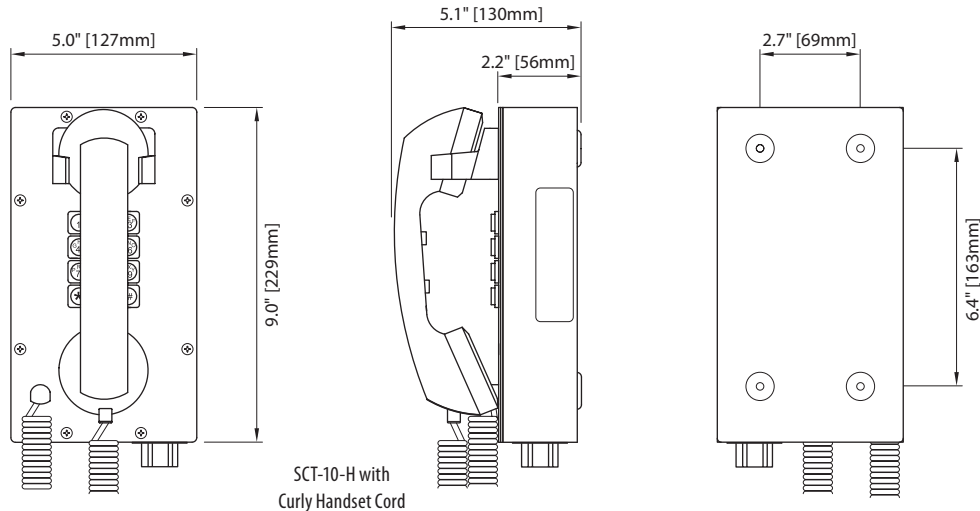
Guardian's SCT-H Series Hazardous Area Steel Compact Telephones are engineered to deliver reliable, high quality communications in moderately harsh environments; where standard telephones are not suitable. Designed for use in industrial applications and ideal for noisy areas.

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## OVERALL DIMENSIONS



SCT-H Series Hazardous Area Steel Compact Telephones

## ENGINEERING SPECIFICATIONS

### ELECTRICAL PERFORMANCE

Audio Range Frequency Response	300 - 3400 Hz
Dialing Method	DTMF or 40/60 Pulse @10 PPS
Transmit Objective Loudness Rating (TOLR)	Nominal -38 +/- 3 dB
Receiver Volume Adjustment	3 Steps Up / 2 Steps Down 8.1dB / 5.1 dB
Receiver Objective Loudness Rating (ROLR)	Nominal 50 +/- 3 dB
- receiver volume at maximum	41.9 +/- 3 dB
- receiver volume at minimum	55.4 +/- 3 dB
Side Tone Objective Loudness Rating (SOLR)	Nominal 11 +/- 4 dB
- receiver volume at maximum	7 +/- 4 dB
- receiver volume at minimum	14 +/- 4 dB
Memory Dial	} SCT-20-H Only
Flash	
Mute	
Ringer Output	10 Quick Dial Numbers 20 Digits Each
FCC Ringer Equivalence	600 mSec Timed Disconnect
Set Impedance	Press Key to Mute Transmitter
Maximum Loop	>85 dB
	0.8 B
	600 Ohms Nominal
	15Kft ( ~4,600m ) of 22 AWG Wire

### ELECTRICAL REQUIREMENTS

Ringer Sensitivity	40 -100 V, 16 - 25 Hz
Line Voltage	24 - 56 VDC
Loop Current	20 - 120 mA
Connection Method	Terminal Block

### MECHANICAL SPECIFICATIONS

Hook Switch ( Cradle Switch ) Life	>1 000 000 Operations
Body Construction	16 Ga CRS Steel
Finish	Corrosion Protected & Powder Coated
Net Weight	4.0 lbs ( 1.81 kg )
Shipping Weight	6.0 lbs ( 2.72 kg )
Shipping Dimensions ( H x W x D )	15.0" x 5.0" x 11.5" ( 381 x 127 x 293 mm )
Hand Set Construction	High Impact ABS
Mounting	Vertical Wall
Microphone	Noise Reducing Electret
Receiver	Hearing Aid Compatible
Hardware Material	Stainless Steel
Wiring Access	1/2" NPT Conduit Hub

### ENVIRONMENTAL

Temperature	-40° to +140°F ( -40° to +60°C )
Humidity	0 - 95% RH Non-Condensing
Corrosion Resistant	Full Gasket Faceplate

### COMPLIANCE

CSA ("C" and "US")	CSA 158194
Industry Canada/Doc FCC	Class I, Div. 2, Groups A, B, C and D
	1012-6721A
	HQHCAN-22517-TE-E

### ORDERING INFORMATION

Warranty: One year parts and labor

Order No.	Description
P6959	SCT-10-H Teleseal Keypad/Curly Cord/Volume Control Handset
P6273	SCT-20-H Membrane Keypad/Curly Cord/Volume Control on Keypad
P6964	SCT-30-H Metal Keypad/Curly Cord/Volume Control Handset
P6965	SCT-40-H Metal Keypad/Armored Cord/Volume Control Handset
<b>Options</b>	
20C	20' (6.1m) Curly Cord for SCT-20-H
20VC	20' (6.1m) Curly Cord, Volume Control Handset for SCT-10-H & SCT-30-H
36AVC	36" (.9m) Armored Handset Cord
72AVC	72" (1.8m) Armored Handset Cord
NC	Dynamic Noise Canceling Microphone
RC-SCT	Retainer clips – must be ordered with phone (standard on SCT-40-H, not available on SCT-20-H)
BP-SCT/SCR	Stainless Steel Back / Mounting Plate

Distributed by:

# SCR-H Series Hazardous Area Steel Compact Ringdown Telephones



## FEATURES and BENEFITS

- Encapsulated circuit boards impervious to water condensation and dust
- 16 gauge, zinc dichromate plated, steel enclosure with powder coat finish
- Heavy duty industrial volume control handset
- Rust and corrosion resistant stainless steel hardware
- Electret noise reducing microphone
- Magnetic reed hook-switch reduces moving parts subject to wear
- Service temperature range from -76° to +176°F (-40° to +60°C)
- Surge arrestor to prevent voltage spike damage
- Hearing aid compatible
- Electronic ringer for reliability
- Modular parts for easy service
- 1/2" NPT Conduit hub
- SCR-11-H – Curly Cord
- SCR-41-H – Armored Cord

## APPLICATIONS

These telephones are designed for use in harsh industrial environments such as:

- Refineries
- Power Generation Facilities
- Pulp and Paper Mills
- Food Processing Plants
- Chemical Plants
- Construction Sites
- Cement Plants
- Sewage Plants
- Drilling Rigs
- Hydroelectric Facilities
- Warehouses
- Mines
- Greenhouses
- and more ...

## INSTALLATION and CONNECTABILITY

To provide flexibility and the potential for growth, Guardian's SCR-H Ringdown telephones can be easily and economically connected to any telephone network through standard wiring and parts. Voice quality is unaffected when phones are connected within 15,000 ft. (~ 4,600 meters) of a main telephone switch supporting single line telephones. Maintaining safety standards may require special wiring conduits or other considerations. Order the SCR-H Ringdown separately or as part of an integrated system.

## ACCESSORIES and OPTIONS

- 20VC – 20' (6.1m) Curly cord, volume control handset for SCR-11-H
- 36" (.9m) & 72" (1.8m) Armored handset cords for SCR-41-H
- NC – Noise canceling microphone
- RC-SCR – Retainer Clips – must be ordered with SCR-11-H (standard on SCR-41-H)
- BP-SCT/SCR – Stainless steel back / Mounting plate
- Ring detect relay
- Off-hook detect relay



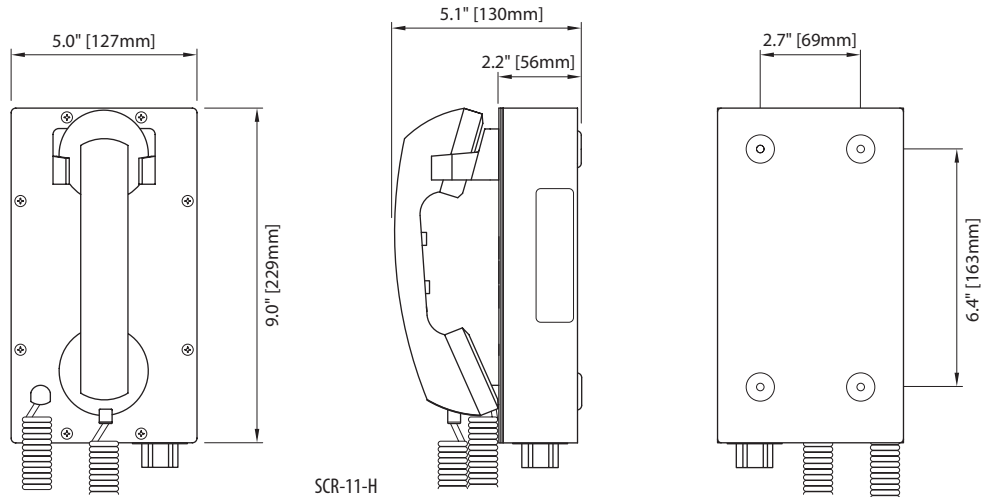
Guardian's SCR-11-H & SCR-41-H Hazardous Area Steel Compact Ringdown Telephones are designed for harsh environments with special communication needs, ensuring high quality communications under extreme working conditions. Lift the handset and PBX programming or an optional Autodialer routes the call to its assigned location.

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ISO-9001:2008 Certification  
Today's Quality Creates Our Future

## OVERALL DIMENSIONS



SCR-11-H  
SCR-H Series Hazardous Area Steel Compact Ringdown Telephones

## ENGINEERING SPECIFICATIONS

### ELECTRICAL PERFORMANCE

Audio Range Frequency Response	300 - 3400 Hz
Connection Method	Hotline Operation
Transmit Objective Loudness Rating (TOLR)	Nominal -38 +/- 3 dB
Receiver Volume Adjustment	3 steps up / 2 steps down 8.1dB / 5.1 dB
Receiver Objective Loudness Rating (ROLR)	Nominal 50 +/- 3 dB
- receiver volume at maximum	41.9 +/- 3 dB
- receiver volume at minimum	55.4 +/- 3 dB
Side Tone Objective Loudness Rating (SOLR)	Nominal 11 +/- 4 dB
- receiver volume at maximum	7 +/- 4 dB
- receiver volume at minimum	14 +/- 4 dB
Ringer Output	>85 dB
FCC Ringer Equivalence	0.9 B
Set Impedance	600 Ohms Nominal
Maximum Loop	~15Kft (4,600m) of 22 AWG Wire

### ELECTRICAL REQUIREMENTS

Ringer Sensitivity	40 -100 V, 16 - 25 Hz
Line Voltage	24 - 56 VDC
Loop Current	20 - 120 mA
Connection Method	Terminal Block

### MECHANICAL SPECIFICATIONS

Hook Switch (Cradle Switch) Life	>1 000 000 Operations
Body Construction	16 Ga CRS Steel
Finish	Zinc Dichromate Plated & Powder Coated
Net Weight	4.0 lbs ( 1.8 kg )
Shipping Weight	6.0 lbs ( 2.7 kg )
Shipping Dimensions ( L x W x D )	15.0" x 5.0" x 11.5" ( 381 x 127 x 293 mm )
Hand Set Construction	High Impact ABS
Mounting	Vertical Wall
Microphone	Noise Reducing Electret
Receiver	Hearing Aid Compatible
Hardware Material	Stainless Steel
Wiring Access	1/2" NPT Conduit Hub

### ENVIRONMENTAL

Temperature	-40° to +140°F (-40° to +60°C)
Humidity	0- 95% RH Non-Condensing
Corrosion Resistant	Full Gasket Faceplate

### COMPLIANCE

CSA ("C" and "US")	CSA 158194
Industry Canada/Doc FCC	Class I, Div. 2, Groups A, B, C and D
	1012-6721A
	HQHCAN-22517-TE-E

### ORDERING INFORMATION

Warranty: One year parts and labor

Order No.	Description
P6962	SCR-11-H Ringdown/Curly Cord/Volume Control Handset
P6963	SCR-41-H Ringdown/Armored Cord/Volume Control Handset

#### Options

20VC	20' (6.1m) Curly Cord, Volume Control Handset – For SCR-11-H
36AVC	36" (.9m) Armored Handset Cord – For SCR-41-H
72AVC	72" (1.8m) Armored Handset Cord – For SCR-41-H
NC	Dynamic Noise Canceling Microphone
RC-SCR	Retainer Clips - must be ordered with SCR-11-H (standard on SCR-41-H)
BP-SCT/SCR	Stainless Steel Back / Mounting Plate

Distributed by:

# DTT-20-H Hazardous Area Industrial Desktop Telephone



DTT-20-H  
Hazardous Area  
Industrial Desktop  
Telephone

Guardian Telecom's DTT-20-H Hazardous Area Industrial Desktop Telephone meets requirements for use in Class I, Division 2 areas. The DTT-20-H is non-incendive, rugged and dust & corrosion resistant.

**Guardian  
Telecom**



ISO-9001:2008 Certification  
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## FEATURES and BENEFITS

- One piece, water resistant membrane keypad
- Heavy duty handset and cord
- Magnetic reed hook switch with no moving parts for extended life
- Encapsulated circuit boards are impervious to water, tropical humidity and mine condensation
- Kydex 100® plastic faceplate is 94V-0 fire retarding, durable, impact resistant and easy to clean
- Rotating the base allows the telephone to be wall mounted
- Electret noise reducing microphone
- Temperature range -40° to +140°F ( -40° to +60°C )
- Volume adjustment and muting
- Ten-number memory, redial and recall

## APPLICATIONS

This telephone is designed for use in locations where the humidity level is high or the atmosphere may be hazardous due to gases or vapors.

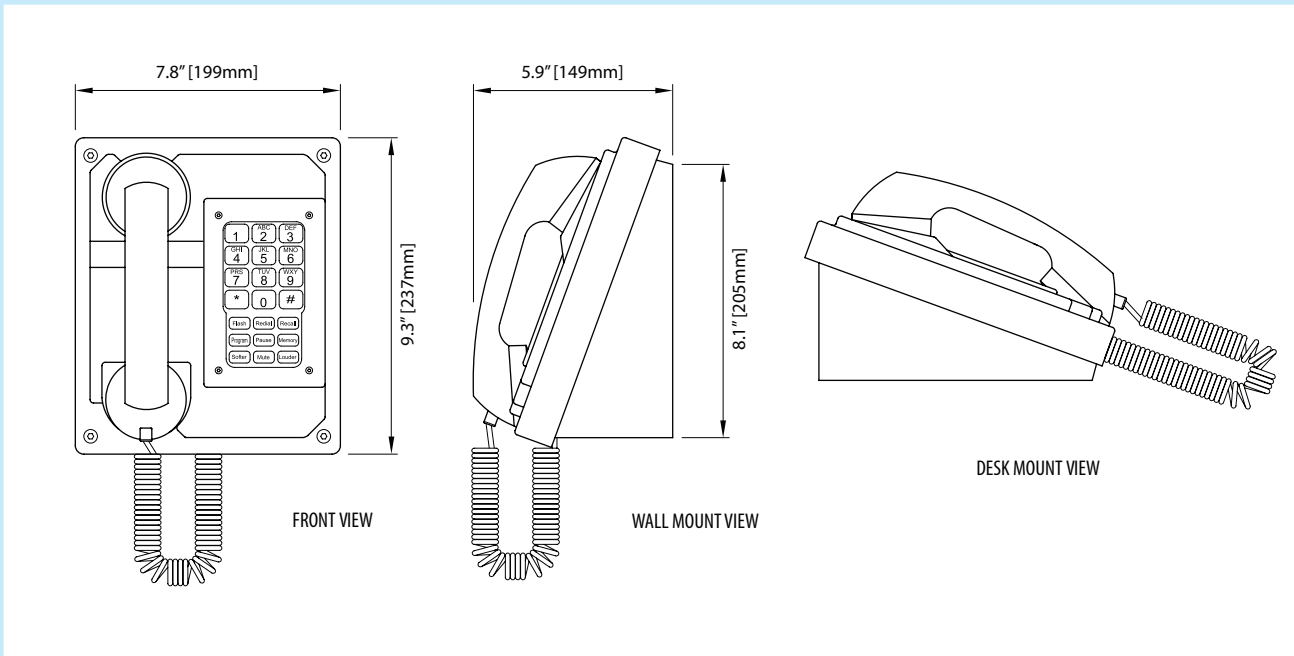
- Processing Plants
- Refineries
- Pulp & Paper Mills
- Chemical Plants
- Marine Drilling Rigs
- Mine Offices
- Bulk Loading Stations
- and more . . .

## INSTALLATION and CONNECTABILITY

To provide flexibility and the potential for system growth, Guardian's DTT-20-H Hazardous Area Industrial Desk Telephone can be easily and economically connected to any telephone network through standard wiring and components. Voice quality is unaffected when phones are connected within 15,000 feet (~ 4,600 meters) of a main telephone switch which accepts single line telephones.

Maintaining safety standards may require wiring conduits or other considerations. Telephones are tone/pulse switchable (the switch is inside telephone). Unless requested otherwise, the initial settings are to tone prior to delivery. In-service switching may require technical assistance.

## OVERALL DIMENSIONS



DTT-20-H Hazardous Area Industrial Desktop Telephone

## ENGINEERING SPECIFICATIONS

### ELECTRICAL PERFORMANCE

Audio Range Frequency Response	300 - 3400 Hz
Dialing Method	DTMF or 40/60 Pulse @10 PPS
Transmit Objective Loudness Rating (TOLR)	Nominal -41 +/- 3 dB
Receiver Volume Adjustment	3 Steps Up / 2 Steps Down 13.5 dB / 2.7 dB
Receiver Objective Loudness Rating (ROLR)	Nominal 50 +/- 3 dB
- receiver volume at maximum	41.9 +/- 3 dB
- receiver volume at minimum	55.4 +/- 3 dB
Side Tone Objective Loudness Rating (SOLR)	Nominal 11 +/- 4 dB
- receiver volume at maximum	7 +/- 4 dB
- receiver volume at minimum	14 +/- 4 dB
Memory Dial	10 Quick Dial Numbers 20 Digits Each
Flash	600 msec Timed Disconnect
Mute	Press Key to Mute Transmitter
Redial	31 Digits Maximum
Ringer Output	>80 dB
FCC Ringer Equivalence	0.9 A
Set Impedance	600 Ohms Nominal
Maximum Loop	15Kft ( ~4,600m ) of 22 AWG Wire

### ELECTRICAL REQUIREMENTS

Ringer Sensitivity	40 -100 V, 16 - 25 Hz
Line Voltage	24 - 56 VDC
Loop Current	20 - 120 mA
Connection Method	8' ( 2.4 m ) Cable to Surge Arrestor in Telephone

### COMPLIANCE

CSA ("C" and "US")	CSA 158194 Class I, Div. 2, Groups A, B, C and D Class I, Zone 2, Group IIC, T5 1012-6721A
Industry Canada	HQHCAN - 22517 - TE - E
FCC	

### MECHANICAL SPECIFICATIONS

Hook Switch ( Cradle Switch ) Life	>1 000 000 Operations
Body Construction	16 Ga Steel
Finish	Corrosion Protected & Powder Coated
Net Weight	5.5 lbs ( 2.5 kg )
Shipping Weight	8.5 lbs ( 3.9 kg )
Shipping Dimensions ( L x W x D )	16.0" x 10.5" x 9.5" ( 407 x 267 x 242 mm )
Faceplate Construction	Kydex 100®
Hand Set Construction	High Impact ABS
Optional Mounting	Vertical Wall
Microphone	Noise Reducing Electret
Receiver	Hearing Aid Compatible
Hardware Material	Stainless Steel

### ENVIRONMENTAL

Temperature	-40° to +140°F ( -40° to +60°C )
Humidity	0 - 95% RH Non-Condensing

### ORDERING INFORMATION

Warranty: One year parts and labor

Order No.	Description
P6570	DTT-20-H Hazardous Area Industrial Desktop Telephone/Curly Handset Cord
<b>Options</b>	
NC	Noise Canceling Microphone
20C	20' (6.1m) Curly Handset Cord

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# Sections

Guardian Telecom's Product and Services Guide Catalogue is a compilation of individual Category Section Publications

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<sup>1</sup> Page/Party® is a registered trademark of GAI-Tronics Inc. Use does not imply endorsement.




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Guardian represents DNH, E2S, Federal Signal, MEDC and TOA, and has access to an extensive range of other world class leading manufacturers. Visit [www.guardiantelecom.com](http://www.guardiantelecom.com) for additional information on Explosion Proof, Hazardous Area, ATEX-IEC and General Area Loudspeakers & Ringers.

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## Guardian Telecom

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