

# 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 SERIES OUTDOOR/INDOOR INDUSTRIAL ANALOG HAZARDOUS TELEPHONES

WRT-10-H/HD Telesal Keypad/Volume Control Handset/Heavy Duty Coil Cord

WRT-20-H/HD Membrane Keypad/Volume Control Handset/Armored Cord

WRT-30-H Metal Keypad/Volume Control Handset/Heavy Duty Coil Cord

WRT-40-H Metal Keypad/Volume Control Handset/Armored Cord/Mounting Plate

## 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

## WR RANGE OF TELEPHONES

Guardian's WR RANGE Weather Resistant Industrial Telephone Series are designed for rough-service areas, special communication needs, that insure high quality communications under extreme working conditions.

## WRT-H/HD SERIES OF TELEPHONES

Guardian's WRT-H/WRT-HD SERIES Weather Resistant Industrial Telephone Series provide reliable service in outdoor environments. WRT-H models are designed for use in Class I, Division 2 hazardous areas where the atmosphere may be hazardous due to the presence of gases, dust, or fibers. WRT-HD are designed for use in Class I, Division 2 and Class II Division 1 & 2 hazardous areas where the atmosphere may be hazardous due to the presence of gases or dust.

## 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:

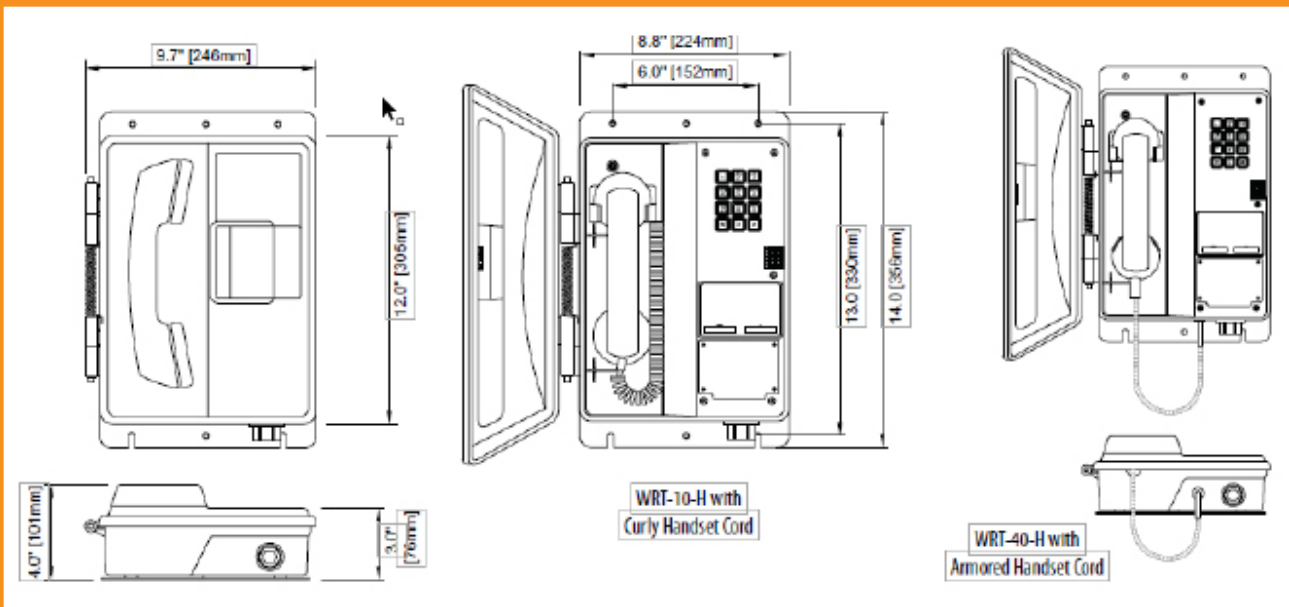
Oil Refineries	Drilling Rigs
Ammonia & Fertilizer Plants	Mines
Paint & Varnish Manufacturing	Bulk Loading Stations
Chemical Plants	Grain Processing Facilities
Sewage Treatment Plants	Food Processing Facilities
Pulp & Paper Mills	and more . . .



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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
<i>*Applies to volume control handset only. – NOTE: WRT-20-H &amp; WRT-20-HD use the non-volume control handset. Volume is controlled via the keypad.</i>	
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	} WRT-H/HD Models Only
Flash	
Mute	
Ringer Output	
FCC Ringer Equivalence	Between 75 and 80 dB
Set Impedance	WRT-H Models 0.8 B / WRT-HD Models 0.8 A
Maximum Loop	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	Surge Arrester

#### 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 Polycarbonate
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. I 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: Three years 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
<i>Options</i>	
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)

Distributed by:



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