

DTT-Z / DTR-Z SERIES

Industrial Desk / Wall Telephones

ATEX / IECEx - Zone 1

DTT-50-Z



DTT SERIES has optional push to talk PTT handset

DTR-61-Z with armored cord



DTR SERIES has volume control handset

DT RANGE OF TELEPHONES

Guardian's DT RANGE are desk and wall mounted industrial telephones designed to provide safe, reliable communication in industrial areas that are prone to harmful environments, where consumer phones are not suitable. Dust and Corrosion resistant.

DTT-Z/DTR-Z SERIES OF TELEPHONES

Guardian's DTT-Z / DTR-Z SERIES - ATEX / IECEx certified telephone products provide safety and protection in atmospheres where a mixture of air and flammable substances in the form of gas, dust, vapor or mist are present frequently, continuously or for long periods.

Guardian Telecom ATEX / IECEx certified equipment delivers safe, reliable communication in hazardous areas that are prone to high humidity, chemical vapors, dust and physical abuse.

DTT-Z/DTR-Z SERIES INDUSTRIAL ANALOG HAZARDOUS TELEPHONES

- DTT-50-Z - Silicone Keypad/Handset/Heavy duty Curly Cord.
- DTT-50-Z-PTT - Silicone Keypad/Handset/Heavy duty Curly Cord/with Push to Talk Handset
- DTT-60-Z - Silicone Keypad/Handset/Armored Cord.
- DTR-51-Z - Direct call ringdown/Volume control Handset/Heavy duty Curly Cord.
- DTR-61-Z - Direct call ringdown/Volume control Handset/Armored Cord.

FEATURES and BENEFITS

- ATEX / IECEx Zone 1, Zone 21 approved – T5 & T6 rated.
- Wide temperature range from -22°F to +140°F (-30°C to +60°C).
- IP66, static dissipative, high impact thermoset industrial housing and handset.
- Reversible base for desktop or wall mount configurations.
- Audio modes – handset and hands-free speaker phone or optional headsets (DTT only).
- Optional Push To Talk (PTT) switch in handset to manually enable microphone (DTT Only).
- Corrosion resistant hardware.
- Noise canceling microphone.
- Self resetting fuse prevents damage to the electronic circuits in the event of a high voltage spike on the telephone line.
- Magnetic reed hook switch to reduce parts subject to wear.
- Factory set to tone (DTMF) Operation.
- Pulse dialing can be software configured in the field, 40:60 or 33:66.
- Removable handset retainer latches on cradle.
- Urethane coated watertight silicon keypad on DTT-Z models.
- Link, Release, Redial and Flash keys on DTT-Z models.
- Hearing-aid compatible (HAC) receiver.
- Receiver Volume Control provides user with a 16 dB range.
- Ergonomic heavy duty handset.
- Heavy duty coil cord on DTT-50-Z and DTR-51-Z or armored cord on DTT-60-Z or DTR-61-Z.
- Built in ring detect relay to switch up to 240V @ 5 amps.
- DTT-Z models feature a back lit LCD display – 2 line x 16 character: English, French or Spanish.
- DTT-Z models – 20 number memory including 10 single quick dial numbers.
- Programmable auto hang-up timer.
- Two M20 and one M12 gland entries.
- Field repairable by authorized personnel.
- Does not require external power – operates on telephone line power.

APPLICATIONS

Chemical Plants
 Fueling Stations
 Fertilizer Plants
 Missile Silos
 Refineries
 Paint Manufacturing
 Terminals

Oil & Gas Metering Facilities
 Munitions Storage Depots
 Breweries and Distilleries
 Tanker and Tanker Depots
 Petrochemical Plants
 (LNG) Liquefied Natural Gas
 Sewage Treatment Plants

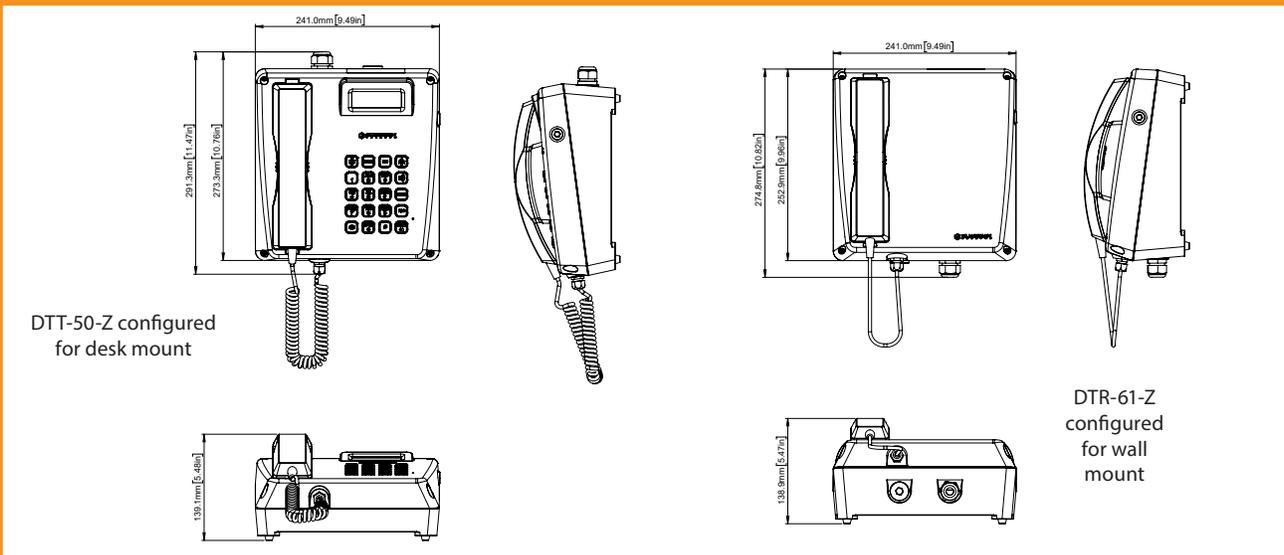
Offshore Drilling Rigs
 Bulk Loading Stations
 Land-based Drilling Rigs
 Defense Installations
 Gas Plants
 Mines
 and more . .



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OVERALL DIMENSIONS



DTT-50-Z configured for desk mount

DTR-61-Z configured for wall mount

DTT-Z Zone 1 Hazardous Area Telephones • DTR-Z Zone 1 Hazardous Area Ringdown Telephones

ENGINEERING SPECIFICATIONS

ELECTRICAL PERFORMANCE

Audible Range Frequency Response	300 - 3400 Hz
Hands Free Speaker Output on DTT-Z Models (Max @ 1KHz)	~85dB @ 1 Meter
Transmit Objective Loudness Rating (TOLR)	Nominal -38.5 +/- 3 dB
Receiver Volume Adjustment on DTT-Z Models	8 Steps, 2 dB/Step
Receiver Objective Loudness Rating (ROLR)	Nominal 50 +/- 3 dB
– receiver volume at maximum	42 +/- 3 dB
– receiver volume at minimum	58 +/- 3 dB
Quick Dial	} DTT Models Only
Flash	
Redial	
Ringer Output	85 dB @ 1M
Ringer Impedance without Ring Detect Relay	>7K Ohms @25 Hz, 30-90 VAC >4K Ohms @ 50Hz, 30-90 VAC >4K Ohms @25 Hz, 30-90 VAC (RDR Not Recommended @ 50Hz)
Ringer Impedance with Ring Detect Relay	600 Ohms Nominal 15Kft (~4,600m) of 22 AWG Wire
Set Impedance	
Maximum Loop	
North American Configuration1	
Dialing Method (DTT Models Only)	DTMF 40:60 Pulse @10 PPS
European Configuration1	
Dialing Method (DTT Models Only)	DTMF or 33:66 Pulse @10 PPS
1Conforms To	Residential and Industrial Areas ETSI TBR 38: May 1998 (Acoustics) ETSI TBR 21: January 1998 (Telephone Network)

ELECTRICAL REQUIREMENTS

Ringer Sensitivity	40 -100 V, 16 - 25 Hz
Line Voltage	24 - 56 VDC
Loop Current	DTT-Z: 26 - 100 mA, DTR-Z: 20 - 100 mA
Connection Method	Terminal Blocks
Fuse – Main Telephone CCT	250 mA – Auto Reset
Ring Detect Relay Contacts (Fused)	5 Amp 250 VAC Fast Blow

MECHANICAL SPECIFICATIONS

Hook Switch (Cradle Switch) Life	> 1 000 000 Operations
Housing Material	High Impact Thermoset Compound
Handset Material	High Impact Thermoset Compound
Net Weight	8.68 lbs (3.95 kg)
Mechanical Dimensions	241mm[9.5"] W x 273mm [10.76"] L x 139mm [5.5"] H
Shipping Weight	10.7 lbs (4.9 kg)
Shipping Dimensions (L x W x D)	16.0" x 10.5" x 9.5" (407 x 267 x 242 mm)
Mounting	Desk or Wall
Microphone	Noise Canceling
Receiver	Hearing Aid Compatible (HAC)
Hardware Material	Stainless Steel
Wiring Access	DTT-Z Models – 2 x M20 & 1 x M12 Cable Gland Entry Points DTR-Z Models – 2 x M20 Cable Gland Entry Points

ENVIRONMENTAL

Corrosion Resistant & Dustproof	Full Gasket Faceplate
Operating Temperature	-22°F to +140°F (-30° to +60°C)*
* The LCD on DTT-Z models may become non-responsive in temperatures under -20°C (-4°F)	
Ingress Protection Rating	IP66
Humidity	0 to 95% RH

COMPLIANCE

IECEX ZONE 1	IECEX EMT 22.0009X
ATEX / IECEX coding	II 2G Ex eb ib mb IIC T5 Gb II 2D Ex ib mb IIIC T100°C Db -30°C ≤ Ta ≤ +60°C II 2G Ex eb ib mb IIC T6 Gb II 2D Ex ib mb IIIC T85°C Db -30°C ≤ Ta ≤ +45°C
Standards Used:	
ATEX:	EN IEC 60079-0:2018 EN IEC 60079-7:2015+A1:2018 EN 60079-11:2012, EN 60079-18:2015+A1:2017 IEC 60079-0:2017 (Edition 7.0) IEC 60079-7:2015+A1:2017 (Edition 5.1) IEC 60079-11:2011 (Edition 6.0) IEC 60079-18:2014+A1:2017 (Edition 4.1)
IECEX:	TRAC09ATEX21205X
EC Certificate No.	

= Explosion Protected



ORDERING INFORMATION

Warranty: Five years parts and labor

Order No.	Description
P9051	DTT-50-Z Telephone/Silicon Keypad /Volume Control on Keypad/Curly Cord
P9052	DTT-60-Z Telephone/Silicon Keypad/Volume Control on Keypad/Armored Cord
P9053	DTR-51-Z Ringdown Telephone/Volume Control on Handset/Curly Cord
P9054	DTR-61-Z Ringdown Telephone/Volume Control on Handset/Armored Cord
Options	
P9066	DTT-50-Z-PTT Telephone/Silicon Keypad /Volume Control on Keypad/Curly Cord/complete with Push to Talk Handset
OA-DTT-PTT DTT Series	Push To Talk (PTT) handset, disables mic when not in-use.
20C-DTT-Zone	20' (6.1m) Curly Cord – For DTT-50-Z Telephone
20C-DTR-Zone	20' (6.1m) Curly Cord – For DTR-51-Z Ringdown Telephone
Headsets	Contact Guardian for Details



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