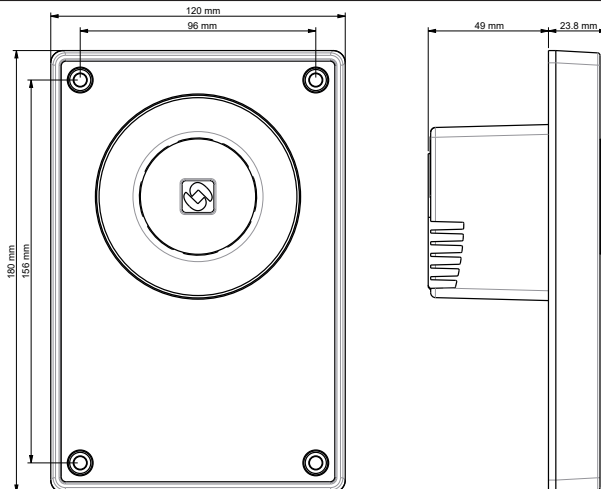# Turbine Compact IP Mounting Manual

1   Turbine Compact IP Stations

This document describes the dimensions, mounting procedure, and connections of the Turbine Compact IP Stations. ***Zenitel takes no responsibility for damages caused by improper or inadequate mounting.***
The Turbine Compact IP product range comprises the following stations & accessories:

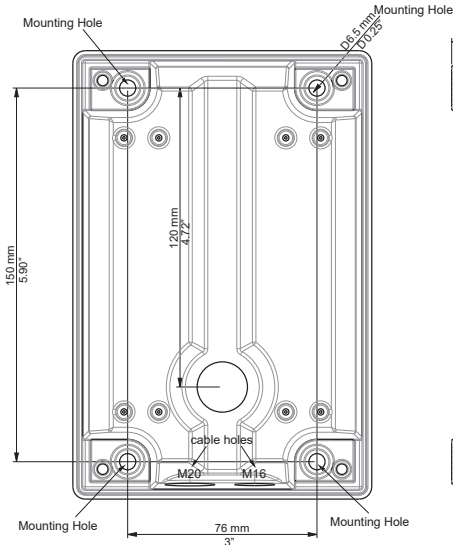| Item Number	Type	Item Name
1008111010	TCIS-1	Turbine Compact IP - thermoplastic front plate
1008111020	TCIS-2	Turbine Compact IP - stainless steel front plate
1008111030	TCIS-3	Turbine Compact IP - thermoplastic front plate
1008111040	TCIS-4	Turbine Compact IP - thermoplastic front plate with PMOLED display
1008111050/1008111901	TCIS-5/TCIS-C1	Turbine Compact IP - thermoplastic front plate with PMOLED display
1008111060	TCIS-6	Turbine Compact IP - thermoplastic front plate with PMOLED display
1008113020	TCIA-2	Turbine Compact Analog over IP Intercom
1008140010	TA-1	Turbine On-Wall Back Box
1008140020	TA-2	Turbine Flush Mount 2-Gang Double-Depth Back Box
1008140050	TA-5	Turbine Bracket for Flush Mount Back Box

| TCIS-1 | TCIS-2/TCIA-2 | TCIS-3 | TCIS-4 | TCIS-5/TCIS-C1 | TCIS-6 |

1.1   TCIS Compact Station Dimensions

2 On-Wall Surface Mounting

2.1 On-Wall Surface Mount Back Box - TA-1

Mounting Hole
Mounting Hole
∅6.5 mm
∅0.25"
25 mm
1"
120 mm
4.72"
150 mm
5.90"
cable holes
M20 M16
Mounting Hole
76 mm
3"
Mounting Hole

ⓘ **IP-66 rating is only valid when TA-1 Back Box is used**
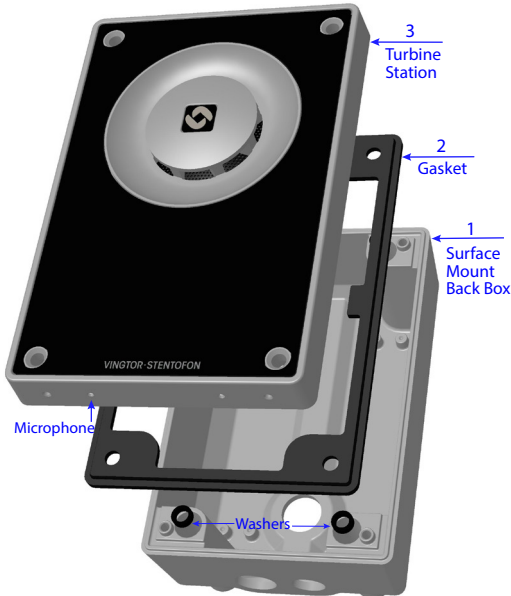
Mounting holes are to be drilled as shown.

Max. recommended screw diameter: ISO M6 or ANSI 1/4".

Screw length must be greater than 25 mm or 1".

A4 stainless steel socket head screws/bolts are recommended.

Max. recommended screw head diameter: 9.5 mm or 3/8".

Included:
4x M5 Fasterners
2x Grommets
1x M20 Cable Gland
4x Washers for extra protection against corrosive effects between surfaces to be placed at bottom of the 4 mounting holes.
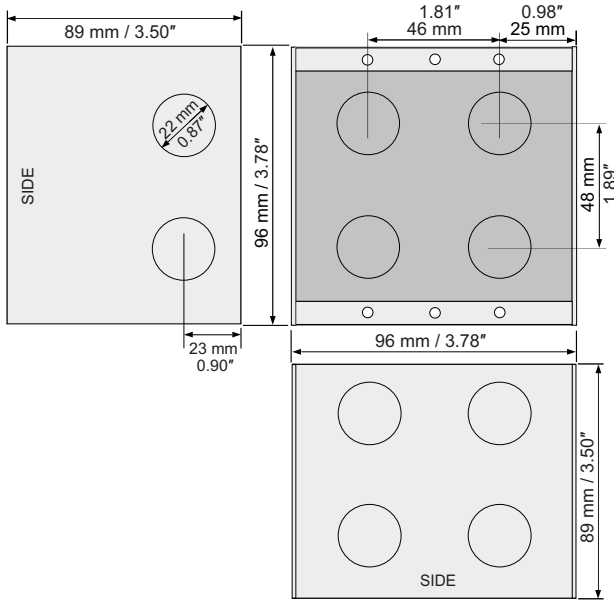
2.2 On-Wall Surface Mounting Procedure

3
Turbine Station

2
Gasket

1
Surface Mount Back Box

Microphone

Washers

ⓘ **The Gasket MUST be mounted to seal the station!**

ⓘ **Ensure the station is mounted vertically with the microphone aperture facing down.**

ⓘ **Ensure there is enough clearance under the station so that the microphone aperture is NOT smothered.**

ⓘ **Place the washers at the bottom of the 4 mounting holes on the back box.**

ⓘ **Use the grommets and M20 cable gland provided for the cable holes on the back box.**

1. Mount the back box onto the wall using A4 socket head screws
2. Fit the gasket onto the back box with the ridged side facing down
   – Plug the Ethernet cable into the RJ-45 port on the station
3. Mount the Turbine station onto the back box with the M5 fasteners provided applying 1.5 Nm torque
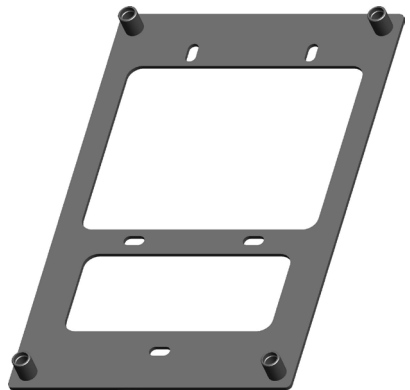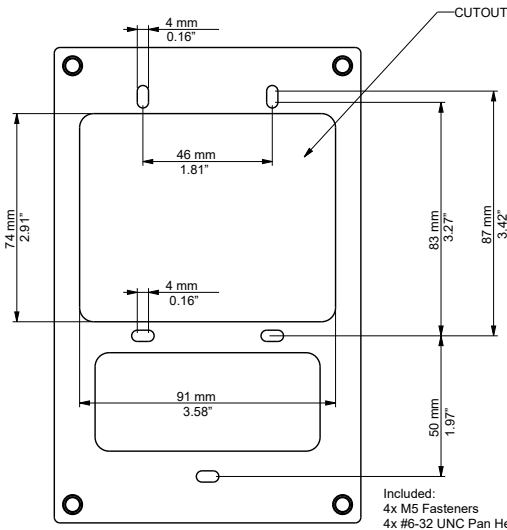
3 Flush Mounting

3.1 Flush Mount 2-Gang Double-Depth Back Box - TA-2

ⓘ It is recommended to utilize back boxes with weep holes at the bottom.

3.2 Flush Mount Bracket - TA-5

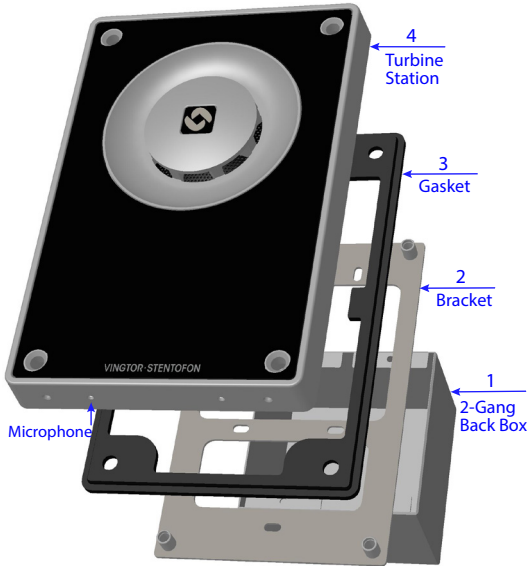ⓘ **The TA-5 Bracket or other customized solution is required for flush mounting.**

Included:
4x M5 Fasteners
4x #6-32 UNC Pan Head Screws

Fits US 2-GANG electrical boxes

Recommended screw diameter: up to M4 (5/32")
Use #6-32 UNC pan head screws for the TA-2 back box

ⓘ **The Gasket MUST be mounted to seal the station!**

- 4 Turbine Station
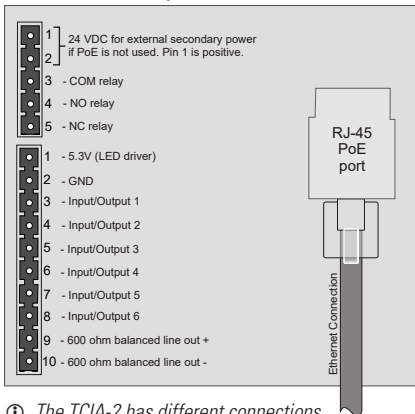- 3 Gasket
- 2 Bracket
- 1 2-Gang Back Box

Microphone

ⓘ **Ensure the station is mounted vertically with the microphone aperture facing down.**

ⓘ **Ensure there is enough clearance under the station so that the microphone aperture is NOT smothered.**

ⓘ **Apply silicone sealant all around the aluminum frame of the station, making sure to leave the microphone aperture open.**

1. Mount the 2-gang back box into the wall
2. Mount the bracket onto the back box with #6-32 UNC pan head screws
3. Fit the gasket onto the bracket with the ridged side facing down
   – Plug the Ethernet cable into the RJ-45 port on the station
4. Mount the Turbine station onto the bracket with the M5 fasteners provided

4 Connections

The Turbine Compact IP station has a RJ-45 PoE/LAN port, and 6-pin & 10-pin external connectors.

1 24 VDC for external secondary power
2 if PoE is not used. Pin 1 is positive.
3 - COM relay
4 - NO relay
5 - NC relay

1 - 5.3V (LED driver)
2 - GND
3 - Input/Output 1
4 - Input/Output 2
5 - Input/Output 3
6 - Input/Output 4
7 - Input/Output 5
8 - Input/Output 6
9 - 600 ohm balanced line out +
10 - 600 ohm balanced line out -

RJ-45 PoE port

Ethernet Connection

ⓘ *The TCIA-2 has different connections*

Ethernet / Power	10/100 Mbps Ethernet RJ-45 port for LAN (uplink) connection. Supports PoE (802.3af). Draws power from either spare line or signal line.
Secondary Power	24 VDC (16 – 48 V) secondary power is provided from an external adapter.
Relays	There is one Double Throw relay contact with 60W switching power. COM, NO, NC contacts are provided. Max: 250VAC/220VDC, 2A, 60W.
Input/Output	6 I/Os are available. Each I/O can be configured as either input, output, or LED driver.
Audio Line Out	A balanced 600 ohm audio line out with induction loop signal

ⓘ *Use cables crimped with ferrules for terminal block connectors*

- When the Turbine Station is connected to the network, its IP address is automatically obtained from a DHCP server or an IP address in the range 169.254.x.x will be assigned.
- To make the station speak its IP address, press the call button on the station.