

1008111020

## TCIS-2

IP and SIP Intercom



 **UL Certified Intercom**

**NEC** NEC Certified

 **Alcatel-Lucent Certified**

 **CISCO Certified**

 **Avaya Certified**

 **Turbine**

 **Door Intercom**

 **IP66**

 **IK10**

 **Automatic Volume**

 **HD Voice**

 **Automatic Gain Control**

 **Active Noise Cancelling**

 **Voice Activity Detection**

## DESCRIPTION

- Vandal resistant SIP and IP intercom
- Audio Presence - crystal clear HD audio
- Amazing sound pressure levels when needed with automatic volume adjustment
- Background noise cancellation
- Dirt, dust and water resistant - rating IP-66
- Built to last with robust die-cast aluminum frame - rating IK 10
- Supports wide set of IP and networking standards
- Stainless steel front plate with one button
- Ideal for Building Security and Public Environments

All IP stations in the Vingtor-Stentofon Turbine series utilize the latest technology to create unparalleled audio quality. Some of the many features include: HD voice quality, Open Duplex, Active Noise Cancellation, MEMS microphone, a 10W Class D amplifier and our unique speaker grille design. These features, in conjunction with Vingtor-Stentofon's 65+ years of experience with acoustic technology are only a few of the many factors that contribute to our superior audio quality.

The unit can be mounted in 2 gang backboxes, onwall back box and pole mounted with custom adaptor plates.

See also: [additional documentation on wiki.zenitel.com](https://wiki.zenitel.com)

## SPECIFICATIONS

### AUDIO

|   |  |
|---|--|
| Audio quality - percentage articulation loss of consonants (Alcons) - at 70 dB                | < 5%*  |
| Audio quality - total harmonic distortion + noise, without noise reduction (THD+N) - at 70 dB | < 2%*  |
| SPL rated power at 1m in open duplex  | 95 dB*   |
| SPL rated power at 1m in half duplex  | 105 dB*  |
| SPL rated power at 1m in program distribution and announcement                                | 105 dB*  |
| Noise cancelling - suppression of musical noise   | YES  |
| Noise cancelling - suppression of static noise  | YES  |
| Noise cancelling - suppression of rapidly changing noise                                      | YES  |
| Codecs  | G.711, G.722, G.729  |
| Frequency range, G.722 Codec  | 200 Hz – 7000 Hz   |
| Audio technology  | Modes: Full open duplex, switched open duplex<br>Adaptive jitter filter<br>Custom Ringing Tone<br>Audio Mixing – Conversation and Group Call<br>Sound Level Detection / scream alarm (only in AlphaCom)<br>Automatic gain control (microphone) |
| Internal speaker amplifier  | 10 W class D   |
| Microphone technology   | Digital MEMS, omnidirectional microphone   |
| Automatic Volume Control (AVC)  | Undistorted and clear audio  |
| Acoustic Echo Cancellation (AEC)  | Prevents audio feedback even at high volumes (95dB)  |
| 10W Speaker   | Matches 10W amp for distortion-free broadcast level sound  |
|   | * Tested with Audio Precision SYS 2722 equipment   |

[Export Table Data](#)

### HARDWARE

|                               |   |
|-------------------------------|---|
| Ethernet connector            | 1 x RJ 45   |
| All other connectors          | Tool less, spring loaded, vibration proof terminals |
| General inputs and outputs    | 6 (configurable)                                    |
| Outputs                       | 12mA as LED drivers                                 |
| Change-over relay (NO+NC+COM) | Max: 250VAC/220VDC, 2A, 60W                         |
| Power options                 | PoE and or external power supply                    |
| PoE (power over Ethernet)     | IEEE 802.3af standard, Class 0 (0.44W to 12.95 W)   |
| External power supply         | 24 VDC (16 – 48 V)                                  |
| Power consumption             | Idle 1.8W, max 12W (depending on volume)            |

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[www.zenitel.com](http://www.zenitel.com)

[info@zenitel.com](mailto:info@zenitel.com)

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**HARDWARE**

|  |                                   |
|--|-----------------------------------|
| Audio Line out / Induction loop signal | 600 Ohm                           |
| Button backlight                       | LED                               |
| Call indication                        | Icons/colors for hearing impaired |

[Export Table Data](#)**CONSTRUCTION**

|   |   |
|---|---|
| Dimensions (HxWxD)                                  | 180 x 120 x 73 mm / 7.1" x 4.7" x 2.9"                  |
| Dimensions after flush mount                        | 180 x 120 x 24 mm / 7.1" x 4.7" x 0.9"                  |
| Dimensions with on wall box                         | 180 x 120 x 86 mm / 7.1" x 4.7" x 3.4"                  |
| Weight  | 1 kg / 2.2 lbs.   |
| Faceplate material                                  | 3 mm / 0.12" stainless steel - AISI 316L                |
| Base / frame material                               | 3 mm / 0.12" Aluminum alloy - A413.0, AISi12Fe, painted |
| Electronics cover material                          | Polycarbonate (translucent)                             |
| Gasket material                                     | Silicone rubber   |
| Fastening bracket material                          | SECC Steel  |
| Button material                                     | 3 mm / 0.12" Polycarbonate (transparent)                |
| Button travel length                                | 1.25 mm   |
| Button activation force                             | 350 gf  |
| Button push-cycles before failure                   | 300 000   |
| Anechoic Design                                     | Open flow anechoic design eliminates "standing waves"   |
| Loudspeaker poke protection, large diameter object  | 3D cast aluminum speaker grille                         |
| Loudspeaker poke protection, small diameter objects | Stainless steel mesh, acoustically transparent          |

[Export Table Data](#)**NETWORKING AND PROTOCOLS**

|                                |  |
|--------------------------------|--|
| Protocols                      | IPv4 (with DiffServ), SIP, TCP, UDP, HTTPS, TFTP, RTP, SRTP, DHCP, SNMPv2c, Vingtor-Stentofon CCoIP® , NTP                       |
| LAN protocols                  | Power over Ethernet (IEEE 802.3 a-f) Network Access Control (IEEE 802.1x)  |
| Management and operation       | HTTP/HTTPS (Web administration and configuration) DHCP and static IP. Remote automatic software upgrade. Centralized monitoring. |
| Advanced supervision functions | E.g. network test, tone test, status reports, uptime, button status.   |
| SIP support                    | RFC 3261 (SIP base standard) RFC 3515 (SIP refer) RFC 2976 (SIP info), SIP using TLS, RFC 5630 SIPS URI scheme                   |
| DTMF support                   | RFC 2833, RFC 2976 (SIP info)  |
| Max length extension numbers   | 20 digits  |

[Export Table Data](#)**ENVIRONMENT AND COMPLIANCES**

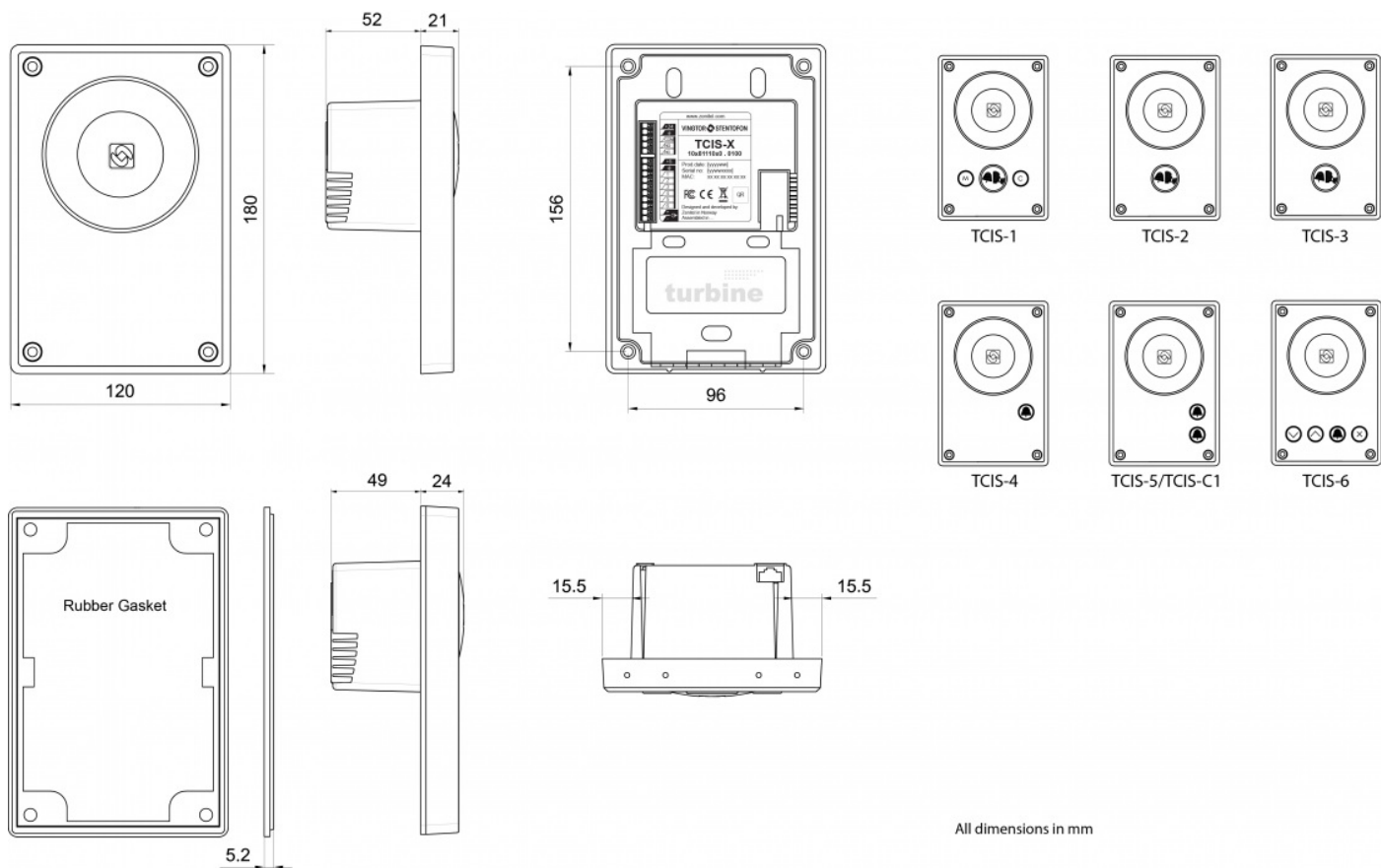
|                             |   |
|-----------------------------|---|
| IP rating                   | IP-66, tested according to EN 60529 (applies when mounted in TA-1 back-box)   |
| IK rating                   | IK 10, tested according to EN 62262   |
| Operating temperature range | -40° to 70° C   |
| Storage temperature range   | -40° to 70° C   |
| Relative humidity           | < 95% not condensing  |
| Corrosion                   | Salty mist, tested according to EN60945   |
| Vibration                   | Tested according to EN60945   |
| UV-resistant                | YES   |
| EMC                         | CE and FCC Part 15 EN 50121-3-2 Railway application EN 50121-4 Railway application UN Regulation 10, revision 4 + Corr.1 + Amend.1  |
| Compliances                 | IEC/EN 60945 Marine Equipment IEC/EN61000-6-1 and IEC/EN61000-6-3 (light industry) IEC/EN 50155 Railway Application * IEC/EN 50486 Equipment for use in audio video door-entry systems * With additional conformal coating Requires use of EN 50155 approved PoE switch |
| Certifications              | UL 60950-1, cUL 60950-1, CB to IEC 60950-1  |

[Export Table Data](#)**OTHER SPECIFICATIONS**

|                       |                                     |
|-----------------------|-------------------------------------|
| IP adress information | Speaks IP address after system boot |
| Button lifetime       | > 1000 000 cycles                   |

\* Testé avec équipement audio de précision SYS 2722

**TECHNICAL DIMENSIONS**



All dimensions in mm

**ACCESSORIES**



**TA-1**

Item Number: 1008140010



**TA-2**

Item Number: 1008140020



**TA-5**

Item Number: 1008140050



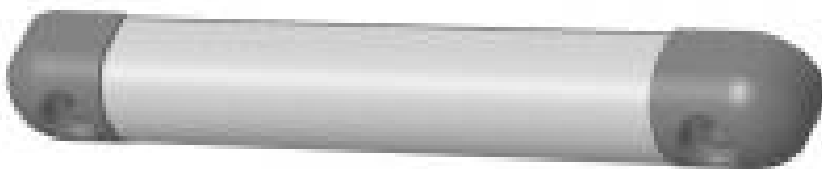
**TURBINE ADAPTER PLATE**

Item Number: 1072160000



**TA-18**

Item Number: 1008140180



**TA-14**

Item Number: 1008140140

1023122061

**ENA2060-DC1**

Exigo Network Amplifier 2 Channels, 60W for Rolling Stock



2809016020

**EMERGENCY STANCHION**

1602 Deluxe Wall Unit



2809016030

**EMERGENCY STANCHION**

1603 Econo Wall Unit

