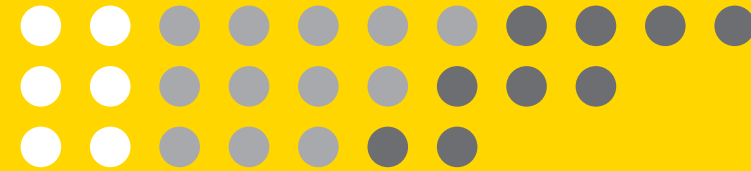


turbine



The Turbine Series provides innovative features and a cutting edge design that will change the way we look at intercom. All IP stations in the STENTOFON Turbine Series utilize the latest technology and STENTOFON's 65+ years of experience in the audio communications industry to create stunning audio quality.

www.stentofon.com

REGISTER ONLINE FOR OUR NEWSLETTER

DOC NO
A100K11243

sales@stentofon.com

Zenitel and its subsidiaries assume no responsibility for any errors that may appear in this publication, or for damages arising from the information therein. STENTOFON and VINGTOR products are developed and marketed by Zenitel. The company's Quality Assurance System is certified to meet the requirements in NS-EN ISO 9001. Zenitel reserves the right to modify designs and alter specifications without notice. ZENITEL PROPRIETARY. This document and its supplementing elements, contain Zenitel or third party information which is proprietary and confidential. Any disclosure, copying, distribution or use is prohibited, if not otherwise explicitly agreed in writing with Zenitel. Any authorized reproduction, in part or in whole, must include this legend. Zenitel – All rights reserved.



turbine
dare we call it an intercom?



when **communication** is **critical**



WHY TURBINE?

The Turbine Series is designed for the most demanding environments where communication is critical.

The stations are extremely robust - they are dust-proof, and water and vandal resistant, with all electronics enclosed by a 3mm thick, aluminum die-casted base. This base is even further reinforced by a faceplate in either stainless steel or thermoplastic.

This durability, in addition to its superior audio quality and modern design make the Turbine Series revolutionary in its approach to audio communications.

dare we call it an intercom?



TCIS-1	1008111010
TCAS-1 (Analog)	1008114010

- Yellow thermoplastic front plate with one button + M and C
- Perfect for Industrial Applications



TCIS-2	1008111020
TCAS-2 (Analog)	1008114020

- Stainless steel front plate with one button
- Perfect for Building Security and Public Environments



TCIS-3	1008111030
TCAS-3 (Analog)	1008114030

- Black thermoplastic front plate with one button
- Perfect for Building Security and Public Environments



TCIS-4	1008111040
--------	------------

- Black thermoplastic front plate with one labelled button
- Unique labelling solution with PMOLED display
- Perfect for Building Security & Public Environments



TCIS-5	1008111050
--------	------------

- Black thermoplastic front plate with two labelled buttons
- Unique labelling solution with PMOLED display
- Perfect for Building Security and Public Environments



TCIS-6	1008111060
--------	------------

- Black thermoplastic front plate with scrolling unit for calling to an unlimited number of places
- PMOLED display
- Perfect for Building Security and Public Environments



STENTOFON ALPHACOM XE



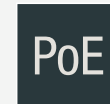
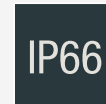
STENTOFON PULSE



SIP PBX

EXCEPTIONAL AUDIO

- A world's first - Open Duplex capabilities at output levels of up to 95dB
- Extreme sound pressure levels of up to 105dB
- Automatic Volume Adjustment
- Active noise cancellation capable of extracting ambient noise levels louder than speaker's voice
- Automatic gain control - constant volume levels are maintained regardless of the speaker's distance from the station.



REFINED DESIGN

- Refined, minimalist Scandinavian design
- Easy, straightforward and understandable interface
- Acoustically superior circular speaker grille

VERSATILITY

- Comprehensive range
- Ideal for many environments and situations
- Stations with both thermoplastic and stainless steel faceplates available

EXTREME ROBUSTNESS

- IP66 and impact resistance between IK 8 and 10
- All electronics are covered by a 3mm thick, aluminum die-casted base
- This base is even further reinforced by a faceplate in either stainless steel or thermoplastic
- Vandal Resistant LED backlit buttons
- Digital MEMS microphone is completely immune to electromagnetic radiation interference.
- Functions at extreme temperatures at both ends of the spectrum, from -25°C to up to 60°C

DISABILITY ACT REQUIREMENTS

- Backlit LED buttons
- Standardized button icons
- Induction loop capabilities
- Active noise cancellation
- Automatic gain control
- Superior audio quality

IP TECHNICAL SPECIFICATIONS

AUDIO	
Audio quality - speech transmission index (STI) - at 70 dB	> 0.8*
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
Frequency range, G.722 Codec	200 Hz – 7000 Hz
Audio technology	Modes: Full open duplex, switched open duplex Adaptive jitter filter Local tone generator Audio mixing - 3 channels Sound level detection (scream alarm) Automatic gain control (microphone)
Internal speaker amplifier	10 W class D
Microphone technology	Digital MEMS, omnidirectional microphone
*Tested with Audio Precision SYS 2722 equipment	

CONSTRUCTION	
Dimensions (HxWxD)	180 x 120 x 70 mm / 7.1" x 4.7" x 2.8"
Dimensions after flush mount	180 x 120 x 20 mm / 7.1" x 4.7" x 0.8"
Dimensions with on wall box	180 x 120 x 82 mm / 7.1" x 4.7" x 3.3"
Weight	0.8 - 1 kg / 1.8 - 2.2 lbs.

Faceplate material	3 mm / 0.12" PMMA, anti reflective coating, color printed on back side
Base / frame material	3 mm / 0.12" Aluminum alloy - A413.0, AISi12Se, anodized and painted
Electronics cover material	Polycarbonate (translucent)
Gasket material	Silicone rubber
Fastening bracket material	SECC Steel
Button material	3 mm / 0.12" PMMA
Button travel length	1.25 mm
Button activation force	350 gf
Button push-cycles before failure	300 000
Vandal resistant fasteners	Stainless steel, security TORX (with pin), T25
Loudspeaker poke protection, large diameter object	3D cast aluminum speaker grille
Loudspeaker poke protection, small diameter objects	Stainless steel mesh, acoustically transparent

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)
Audio line out / induction loop signal	600 Ohm
Button backlight	LED
Call indication	Icons / colors according norm for hearing impaired
For Stations TCS-4, TCS-5, TCS-6	
Door open indication	Icons / colors according norm for hearing impaired
Display technology	PMOLED
Display contrast	20000:1
Viewing angle	160 deg
Display brightness	120 cd/m2
Display lifetime	100 000 hours (11.5 years)