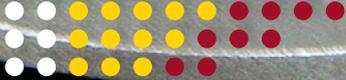


VINGTOR  STENTOFON



# turbine

dare we call it an intercom?

when communication is critical

## WHY TURBINE?

The Turbine Compact 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?



- |        |    |                    |
|--------|----|--------------------|
| Analog | IP |                    |
| ✓      | ✓  | <b>ALPHACOM XE</b> |
|        | ✓  | <b>PULSE</b>       |
|        | ✓  | <b>SIP PBX</b>     |



## 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 reducing 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

## DISABILITY ACT REQUIREMENTS

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



**TCIS-1** 1008111010  
 TCAS-1 (Analog) 1008114010

- Yellow thermoplastic front plate with one button + M and C
- 180x120x70(20 mount) mm
- Perfect for Industrial Applications



**TCIS-2** 1008111020  
 TCAS-2 (Analog) 1008114020

- Stainless steel front plate with one button
- 180x120x70(20 mount) mm
- Perfect for Building Security and Public Environments



**TCIS-3** 1008111030  
 TCAS-3 (Analog) 1008114030

- Black thermoplastic front plate with one button
- 180x120x70(20 mount) mm
- Perfect for Building Security and Public Environments



**TCIS-4** 1008111040

- Black thermoplastic front plate with one labelled button
- Unique labelling solution with PMOLED display
- 180x120x70(20 mount) mm
- Perfect for Building Security & Public Environments

## EXTREME ROBUSTNESS

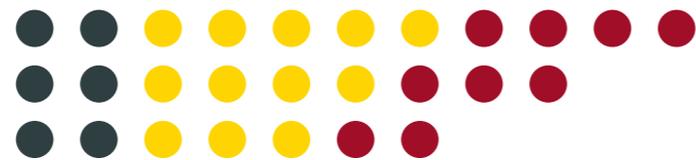
- IP 66 and impact resistance between IK 8 and 10
- All electronics are covered by a 3mm thick, aluminum die-casted base
- This base is even further reinforced by a faceplate in either stainless steel or thermoplastic
- Vandal Resistant LED backlit buttons
- Digital MEMS microphone is completely immune to electromagnetic radiation interference
- Functions at extreme temperatures at both ends of the spectrum, from -40°C to up to 70°C

## VERSATILITY

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

## REFINED DESIGN

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



## IP TECHNICAL SPECIFICATIONS

AUDIO	
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 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



## COMPACT IP VIDEO STATION

- HD Video at up to 30 FPS (720p)
- Wide angle lens (90°)
- MJPEG and H.264 for integration with most Video solutions



**TCIS-5** 1008111050

- Black thermoplastic front plate with two labelled buttons
- Unique labelling solution with PMOLED display
- 180x120x70(20 mount) mm
- 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
- 180x120x70(20 mount) mm
- Perfect for Building Security and Public Environments



**TCIV-3** 1008115030

- Wide angle lens
- Black thermoplastic front plate with one button
- IP 65
- 180x120x70(20 mount) mm
- Perfect for Building Security and Public Environments

VIDEO	
Resolution	320x240 / 640x480 / 1280x720
Frame Rate	Up to 30 FPS in 720p
Supported Codecs	MJPEG, H.264
Digital PTZ	Yes
Digital Zoom	Up to 2x (320x240 pixels)
Field of View	90 degrees*
Snapshot Function	No

\* FoV depends on video mode (may be subject to change)



◀ Remote software upgrade, configuration and monitoring



## TKIS-2 1008131020

- Audio Presence - crystal clear audio
- DIN-rail mountable, clips included
- Add VoIP/CCoIP to your parking solution, cash point, vending machine, et al
- Build your own IP Intercom station or help point
- Make your own 10W IP Speaker
- Control relay and I/Os over IP
- Supports AlphaCom, Pulse and SIP (for use with any IPBX)
- Supports a wide set of IP networking standards
- Remote software upgrade, configuration and monitoring
- Powered from the IP network cable using Power over Ethernet (PoE)
- Advanced audio technology like automatic gain and volume adjustment, background noise cancellation, open duplex, etc.

## MAKE YOUR OWN:

- ▶ VoIP INTERCOM
- ▶ VoIP SPEAKER
- ▶ VoIP AMPLIFIER

### OPEN VoIP INTERFACE

The Turbine VoIP Intercom Module (TKIS-2) adapts to any indoor or outdoor enclosure making it ideal for any type of VoIP application. The TKIS-2 unit will register to any SIP server, but can also run its own SIP platform called PULSE. Use the kit to build your own 10W Class-D IP-Speaker or transform an old-fashioned amplifier into a modern IP-based amplifier.

## NEW! TURBINE MINI

# COMPACT AND ELEGANT INDOOR IP INTERCOM

The Turbine Mini IP Substation (TMIS-1) is robust and designed for indoor use. This station is typically used as a communication, information or emergency point and connects directly to the IP network, making it easy to deploy anywhere and at any distance. The station can be flush-mounted or by using an on wall box.

## TMIS-1 1008116010

- Background noise cancellation
- Built to last with robust die-cast aluminum frame
- Supports wide set of IP and networking standards
- IP 42
- White thermoplastic front plate with one button
- 116x116x40(5 mount) mm
- Perfect for Building Security and Public Environments





The Turbine Industrial and EX intercom stations are rugged devices, designed for harsh environments and meets industrial and offshore requirements. The plastic housing is designed to withstand most chemical and environmental hazards found on- or offshore.

## INDUSTRIAL IP INTERCOM STATION

- CCoIP/VoIP intercom for industrial environments
- Dual Ethernet connectivity for redundant networks
- PoE powered
- Auxiliary DC power for redundancy
- DIP functionality for use with AlphaCom audio servers
- SIP/VoIP functionality for use with 3rd-party systems
- Dual relay outputs
- 6 configurable I/Os
- Dust and waterprotected to IP 66 (IEC/EN 60529)
- Monitoring and self-diagnostics of critical functionality
- Visible status indicators on front panel
- Accessories include Handheld PTT mic, Headset with PTT and Handset with PTT

### TFIE-2

1008122020

- 6 programmable, labelled buttons and optional key covers for alarm panel duties
- 170 x 340 x 100 mm
- Perfect for Industrial environments



### TFIE-1

1008122010

- Full keypad with one programmable button + keys for manual override, (PTT) and Cancel.
- 170 x 340 x 100 mm
- Perfect for Industrial environments



## EXPLOSION PROOF IP INTERCOM STATIONS

- CCoIP/VoIP intercom for explosive environments (ATEX /IECEX)
- EX: II 2(2)G Ex e ib mb [ib] IIC T4 Gb
- Ethernet compatible 2-wire interface
- DIP functionality for use with AlphaCom audio servers
- SIP/VoIP functionality for use with 3rd-party systems
- Dust and water protected to: IP 64 (IEC 60079-0), IP 66 (EN 60945)
- Monitoring and self-diagnostics of critical functionality
- Visible status indicators on front panel
- Accessories include Handheld PTT mic, Headset with PTT and Handset with PTT



### TFIX-1

1008123010

- Full keypad with one programmable button + keys for manual override, (PTT) and Cancel
- 170 x 340 x 100 mm
- Perfect for Offshore and Industrial environments



### TFIX-2

1008123020

- 6 programmable, labelled buttons and optional key covers for alarm panel duties
- 170 x 340 x 100 mm
- Perfect for Offshore and Industrial environments

### TFIX-3

1008123030

- Call button, manual override (PTT) and cancel.
- 170 x 340 x 100 mm
- Perfect for Offshore and Industrial environments

## 3 DIFFERENT MODES TO CONNECT YOUR STATION

Our IP Intercom Stations comes with three different modes for easy connection to almost any relevant audio system.

### ALPHACOM

With AlphaCom audio servers, flexibility is key. You can have just a few or thousands of users spread around different locations. Thanks to its open, modular design and scalable architecture, AlphaCom has the flexibility to grow with your business and adapt to your long term needs. The system can be tailored to support applications of almost unlimited specificity and complexity.

### PULSE

Vingtor-Stentofon Pulse is an ideal economical solution for your smaller communication requirements. The system allows for as few as two stations and is

scalable according to your needs. Based on Zenitel's IP technology, Vingtor-Stentofon Pulse offers High Definition voice quality, simple installation and ease of use. The IP based system works by utilizing an existing IP network infrastructure. It employs open standards including SIP, HTTP and XML, making it simple to integrate and expand with third party systems.

### SIP

Offering our IP product range in SIP-mode is a natural progression in our long history driven by innovation. It is a result of our dedication to provide our customers with the best products that work anywhere as part of any IPBX system.

### WHAT IS VINGTOR-STENTOFON?

Vingtor-Stentofon, owned by the Zenitel Group, is a combination of two leading IP Voice Audio and Public Address systems formerly known as Vingtor and Stentofon. In November 2014, Zenitel combined these two brands into one corporate brand Vingtor-Stentofon. The merger of the two brands was a strategic goal in keeping with Zenitel's corporate objectives as all products are designed, developed and manufactured under the Zenitel Group.

The Zenitel Group has a strong presence in both the onshore and offshore secure communications market through its global product brand Vingtor-Stentofon. The Company's main product offering is within Public Address & General Alarm, Intercom, Radio and integrated communications systems. For more information visit [www.zenitel.com/about](http://www.zenitel.com/about).

## THE TURBINE FAMILY



TCIS-1



TCIS-2



TCIS-3



TCIS-4



TCIS-5



TCIS-6



TCIV-3



TMIS-1



TKIS-2



TFIE-1



TFIE-2



TFIX-1



TFIX-2



TFIX-3

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