

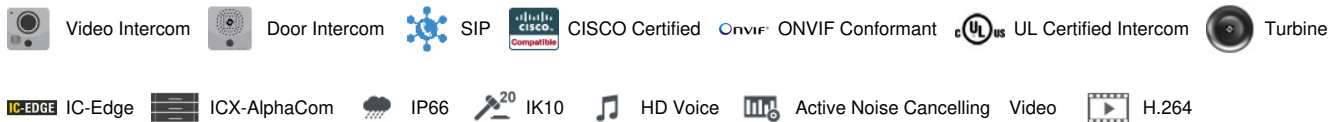


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## TCIV-2+

IP and SIP Video Intercom

- ✓ Powerful audio technology including high sound pressure, automatic volumegain control, and active noise echo canceling
- ✓ HD video up to 1080p resolution
- ✓ Wide angle lens
- ✓ High performance hardware platform with 4 x Cortex-A53 CPU cores and 512MB LPDDR4 RAM
- ✓ ONVIF Conformant
- ✓ Vandal Resistant Design
- ✓ IP66 - Dirt, dust and water resistant
- ✓ Cybersecurity compliant
- ✓ Can operate in SIP, IC-EDGE and ICX-AlphaCom mode



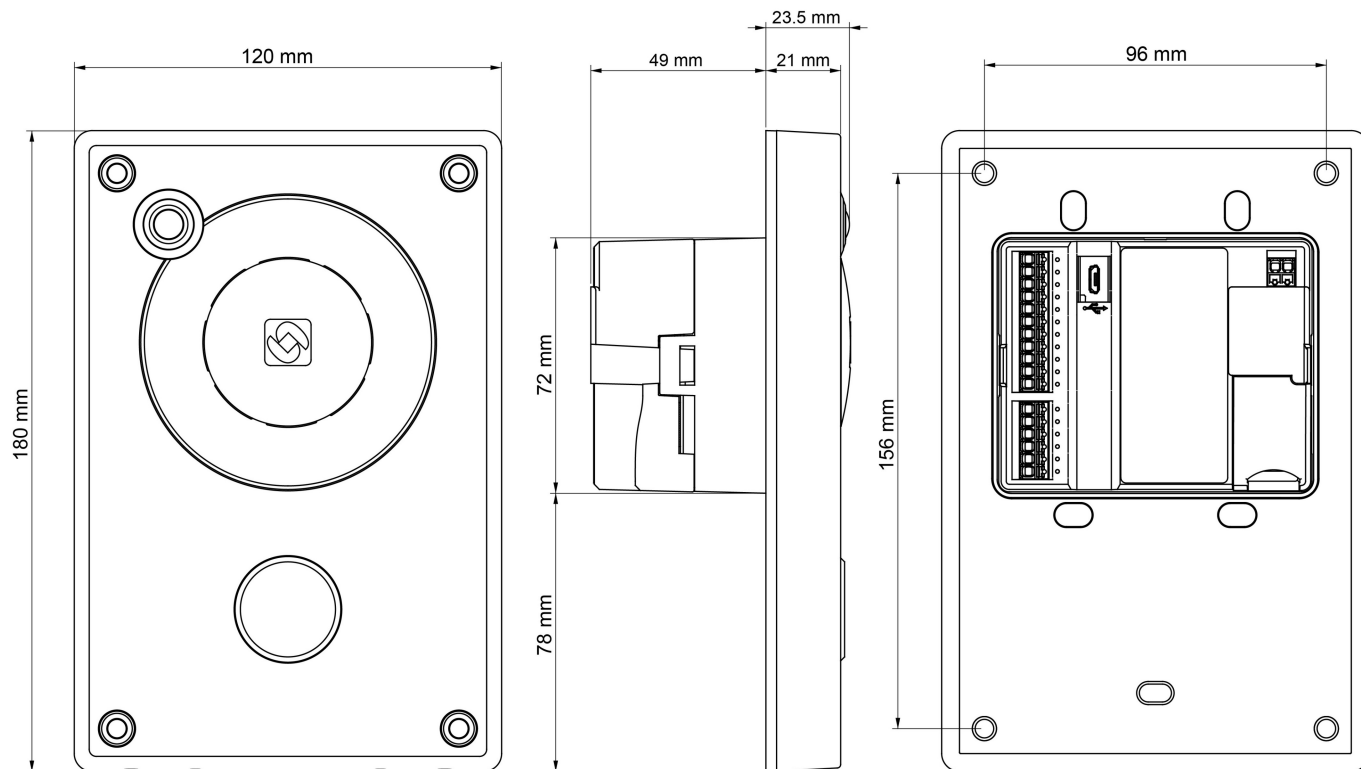
## Description

The TCIV-2+ station, as all IP stations in the 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 the company's 70+ years of experience with acoustic technology, are just a few of the many factors that contribute to our superior audio quality.

The Turbine IP Video Intercom range expands this feature set with wide FoV HD Video, Digital PTZ and support for H.264 and MJPEG.

## Technical Dimensions



# Specifications

## AUDIO

|                                                               |                                                         |
|---------------------------------------------------------------|---------------------------------------------------------|
| SPL peak power at 1m in open duplex                           | 90 dB                                                   |
| SPL peak power at 1m in half duplex                           | 100 dB                                                  |
| SPL peak power at 1m in program distribution and announcement | 100 dB                                                  |
| Noise cancelling                                              | 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 buffer                                  |
|                                                               | Custom Ringing Tone                                     |
|                                                               | Audio Mixing – Conversation and Group Call              |
|                                                               | Automatic gain control (microphone)                     |
|                                                               | Sound Level Detection / scream alarm (in AlphaCom mode) |
| Internal speaker amplifier                                    | 10 W class D                                            |
| Internal speaker                                              | 10 W                                                    |
| Microphone technology                                         | Digital MEMS, omnidirectional microphone                |
| Automatic Volume Control (AVC)                                | Yes                                                     |
| Acoustic Echo Cancellation (AEC)                              | Yes                                                     |

## VIDEO

|                       |                                                                                       |
|-----------------------|---------------------------------------------------------------------------------------|
| Image Sensor          | 1/2.5" RGB CMOS                                                                       |
| Lens                  | F 2.0, fixed iris                                                                     |
| Light Sensitivity     | Down to 1 lux                                                                         |
| Resolution            | 240 / 480p / 960x720p / 1440x1080p*                                                   |
| Frame Rate            | Up to 30 FPS in 1440x1080p**                                                          |
| Supported Codecs      | MJPEG, H.264 **                                                                       |
| Digital PTZ           | Yes                                                                                   |
| Digital Zoom          | Up to 2x                                                                              |
| Field of View         | Configurable up to 180 degrees horizontally and vertically                            |
| Parallel videostreams | 6 (1x SIP H.264, 2x HTTP MJPEG, 3x RTSP sessions)                                     |
|                       | * MJPEG does not support 720p and 1080p resolution.                                   |
|                       | ** 30 FPS is only supported in H.264 mode, while MJPEG is limited to 10 FPS.          |
|                       | *** AlphaCom mode supports only RTSP H.264 mode, while other modes support SIP H.264. |

## 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)          | SELV                                                |
| Power options                          | PoE, PoE+                                           |
| PoE (Power over Ethernet)              | IEEE 802.3af standard, IEEE 802.3at                 |
| Power consumption                      | Idle 3.5W, max 12W (depending on volume)            |
| Audio Line out / Induction loop signal | 0 dBV                                               |
| Button backlight                       | LED                                                 |
| Call indication                        | Icons/colors for hearing impaired                   |

**PROCESSOR/CHIPSET**

|                 |                |
|-----------------|----------------|
| CPU cores       | 4 x Cortex-A53 |
| CPU Clock Speed | 1.6 GHz        |
| RAM             | 512 MB LPDDR4  |
| Flash           | 1 GB           |
| Video encoder   | MJPEG, H.264   |
| Dual Image      | Yes            |

**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, AlSi12Fe, painted |
| Electronics cover material                          | Polycarbonate (semi translucent)                        |
| Gasket material                                     | TPV                                                     |
| 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                                                 |
| Loudspeaker poke protection, large diameter object  | 3D cast aluminum speaker grille                         |
| Loudspeaker poke protection, small diameter objects | Stainless steel mesh, acoustically transparent          |
| Anechoic Design                                     | Open flow anechoic design eliminates "standing waves"   |

## NETWORKING & PROTOCOLS

|                                |                                                                                                                                         |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| Protocols                      | IPv4 (with DiffServ), SIP, TCP, UDP, HTTPS, TFTP, RTP, RTSP, RTCP, SRTP, DHCP, SNMP, Vingtor-Stentofon CCoIP®, NTP, ONVIF, WS-Discovery |
| LAN protocols                  | Power over Ethernet (IEEE 802.3 a-f), Power over Ethernet (IEEE 802.3at), Network Access Control (IEEE 802.1x)                          |
| Management and operation       | HTTP/HTTPS (Web configuration)<br>DHCP and static IP. Remote automatic software upgrade.<br>Centralized monitoring.                     |
| Advanced supervision functions | E.g. network test, tone test, status reports                                                                                            |
| 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, 2976 (SIP info)                                                                                                               |
| Integration and API            | AlphaCom, Scripting (plugins)                                                                                                           |

## ENVIRONMENTAL

|                             |                                                                             |
|-----------------------------|-----------------------------------------------------------------------------|
| IP rating                   | IP-66, tested according to EN 60529 (applies when mounted in TA-1 back-box) |
| Operating temperature range | -30° to 70° C / -22° to 158 ° F                                             |
| Storage temperature range   | -40° to 70° C / -40° to 158 ° F                                             |
| Relative humidity           | < 95% not condensing                                                        |
| UV-resistant                | Yes                                                                         |
| EMC                         | CE and FCC Part 15                                                          |

## CERTIFICATIONS

|                  |           |
|------------------|-----------|
| ONVIF Conformant | Profile S |
|------------------|-----------|

## OTHER SPECIFICATIONS

|                        |                                     |
|------------------------|-------------------------------------|
| IP address information | Speaks IP address after system boot |
| Country of manufacture | Poland                              |

## Accessories



TA-1

Turbine Compact Onwall Back Box



TA-2

US 2-Gang 3 1/2" Deep Backbox



TA-5

Bracket for US 2 GANG Double Depth Back Box



TA-18

Turbine Compact Flush-Mount Back Box



TA-14

Microphone windshield for TCIS / TCIV



Touchless Sensor

## Used With



ITSV-4

HD IP Video Phone with 5" Screen



ITSV-5

HD IP Video Phone with 8" Screen