

1008132020

## TKIE-2

Turbine Extended IP Kit



**IC-EDGE** IC-Edge



SIP



ICX-AlphaCom



Exigo



Turbine



Automatic Volume



HD Voice



Automatic Gain Control



Active Noise Cancelling



Open Duplex



Voice Activity Detection

## DESCRIPTION

The TKIE-2 is the extended version of our Turbine Kit range and our most flexible integration platform. It offers the same high quality audio as the TKIS-2 kit, and adds to the feature list with an extra RJ45 port for dual Ethernet connectivity, dual relays, and a header for easy connection of audio in and outputs, such as line-level inputs/outputs and audio accessories such as headsets/handsets.

The TKIS/TKIE range can be used as a point of integration for AlphaCom and Exigo systems towards legacy PAGA, radio systems, analogue PABX, etc.

The TKIE-2 offers I/O and signal relays. For high-power switching applications, the TKIE-2 may be complemented with the TA-10 Relay Module which offers 2 DPDT relays suited for high-voltage/high-current loads.

## FEATURES

- IP station kit with extended functionality
- Dual RJ45 for Ethernet connectivity (with switch)
- Dual relays (DPDT)
- 6 configurable I/Os (input, output or LED-driving)
- Line-in/Line-out connectivity for connection to audio devices
- Header for connecting audio accessories
- Possibility for connecting high-power relay module (TA-10)
- High quality Turbine™ class output with 10W amplifier
- Full open duplex and digital noise reduction
- Metal enclosure suitable for DIN-rail mounting

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

## SPECIFICATIONS

### AUDIO

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 à 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)
	Automatic volume adjustment
	10 W class D
	Digital MEMS microphone
	Electret microphone
	8 ohm

### HARDWARE

Ethernet connector	2 x RJ45
All other connectors	Tool less, spring loaded, vibration proof terminals
General inputs and outputs	6 (configurable)
Outputs	12mA as LED drivers
Change-over relays (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.ringuk.com](http://www.ringuk.com)

[sales@ringuk.com](mailto:sales@ringuk.com)

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## HARDWARE

Audio line out / induction loop signal	600 ohm
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## NETWORKING AND PROTOCOLS

Protocols	IPv4 (with DiffServ), SIP, TCP, UDP, HTTPS, TFTP, RTP, DHCP, SNMP, Vingtor-Stentofon CCoIPÂ®, NTP
LAN protocols	Power over Ethernet (IEEE 802.3 a-f) Network Access Control (IEEE 802.1x)
Management and operation	HTTP/HTTPS (Web configuration) DHCP and static IP + Vingtor-Stentofon Pulseâ„ƒ Remote automatic software upgrade 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)
DTMF support	RFC 2833, 2976 (SIP info)

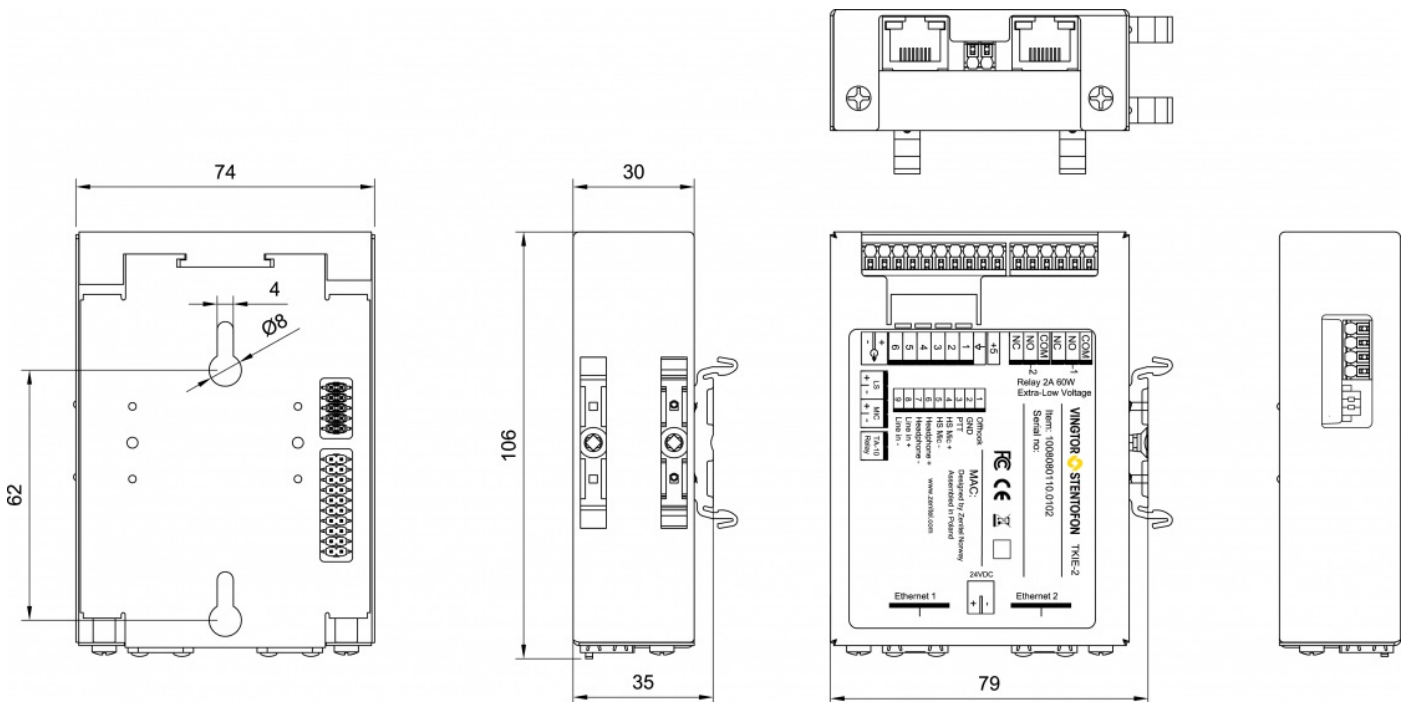
## ENVIRONMENT AND COMPLIANCES

Operating temperature range	-40Â° to 70Â° C / -40Â° to 158 Â° F
Storage temperature range	-40Â° to 70Â° C / -40Â° to 158 Â° F
Relative humidity	< 95% not condensing
EMC	CE and FCC Part 15

## OTHER SPECIFICATIONS

IP address information	Speaks IP address after system boot (requires connected loudspeaker)
Dimensions (HxWxD)	74 x 106 x 30 mm / 2.9â€ x 4.2â€ x 1.2â€
Weight	0.1 kg / 0.2 lbs
Encapsulation material	Steel

## TECHNICAL DIMENSIONS



## ACCESSORIES



**TA-10**

Item number: 1008140100



**TA-16**

Item number: 1008140160



**TA-17**

Item number: 1008140170

## USED WITH



**1023122061**

**ENA2060-DC1**

Exigo Network Amplifier 2 Channels, 60W for Rolling Stock