Pages in the web server

The Home page

The web server starts up on the Home page. To go back to the Home page from another location in the web server, select **Home** from the left navigation pane.

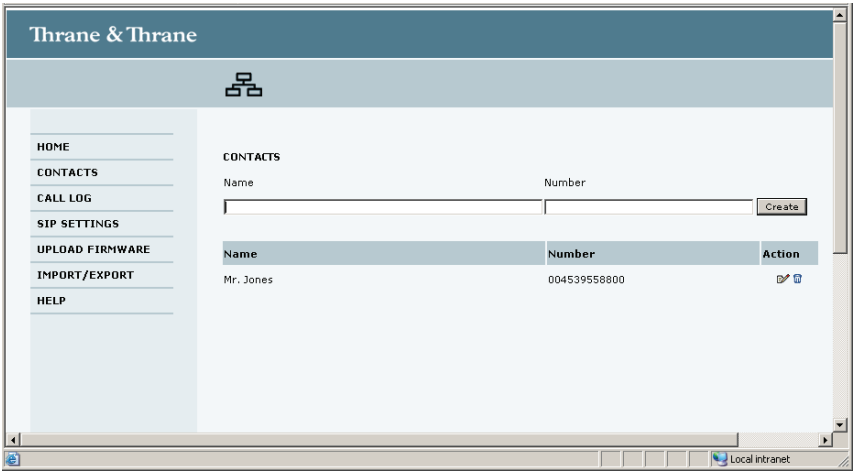
The Home page shows properties and network settings of the handset. The page is automatically updated every 5 seconds.

Contacts

The web server gives access to the Contacts list of the handset.

Select **CONTACTS** from the left navigation pane. The page shows the name and number of all contacts in the handset.

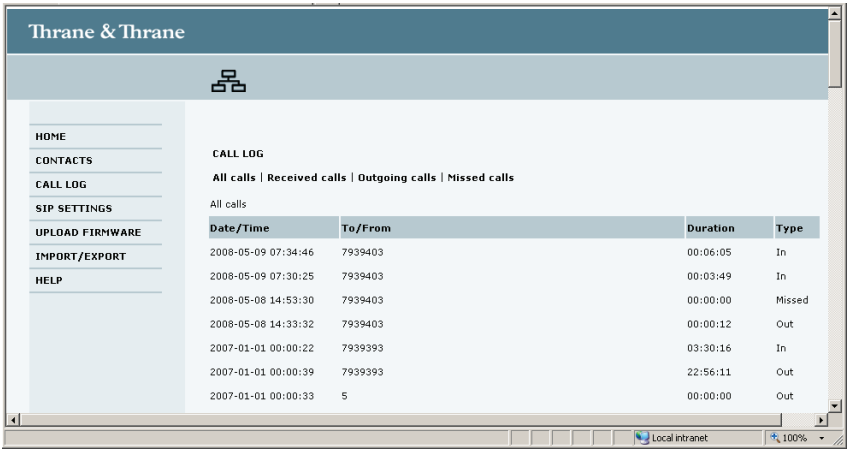
You can sort the list by name or number by clicking **Name** or **Number** in the heading row of the list.



- To add a new contact, type in the name and number at the top of the page and click **Create**. The Contacts list can hold 100 entries.
- To delete a contact, click next to the contact you want to delete.
- To edit a contact, click next to the contact you want to edit, and make your corrections.

Call log

To display the call log of the handset, select **CALL LOG** from the left navigation pane.



For each call the CALL LOG page shows date and time, phone number, duration and whether the call was incoming, outgoing or missed. If the phone number is in the Contacts list, the name of the contact is shown with the number.

The latest calls are listed first.

If you only want to see a subset of the calls, select one of the sub-groups at the top of the page. You can select Received calls, Outgoing calls or Missed calls.

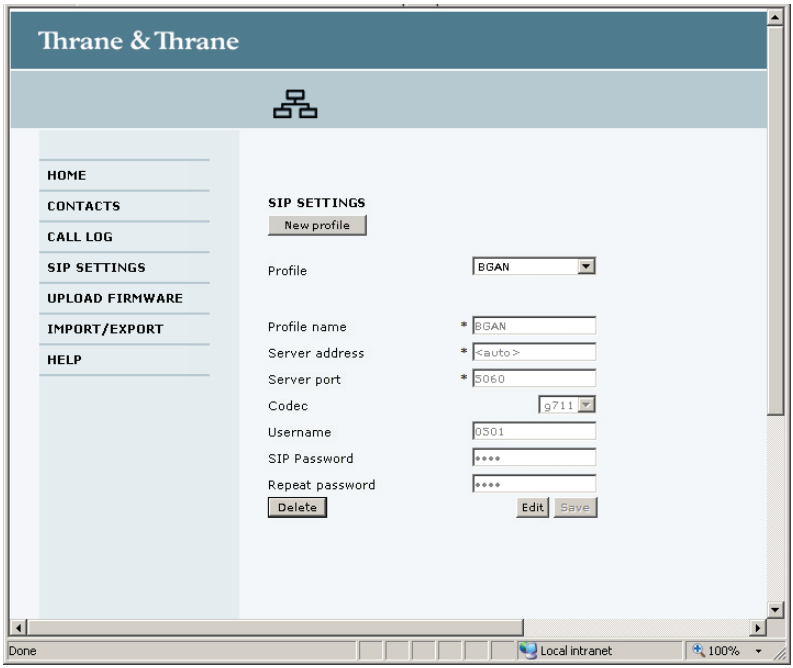
SIP settings

Overview

The handset communicates using SIP (Session Initiation Protocol).

To view the SIP settings of the handset, select **SIP SETTINGS** from the left navigation pane.

The page shows the settings for the current SIP profile.



To add a new profile

The list of SIP profiles can hold maximum 10 profiles.

To add a new profile, do as follows:

1. Click **New profile** at the top of the page.
2. Fill in the list.
   You may not need to fill in all items in the list. Mandatory fields are marked with ＊.
3. Click **Save** at the bottom of the page.

To edit a profile

Do as follows:

1. From the **Profile** scroll list select the profile you want to edit.
2. Change the settings according to your needs.

   Note For the BGAN profile, you can only change the user name and password. Be careful if you change these - the user name is also the local phone number.
3. Click **Save** at the bottom of the page.

To delete a profile

Do as follows:

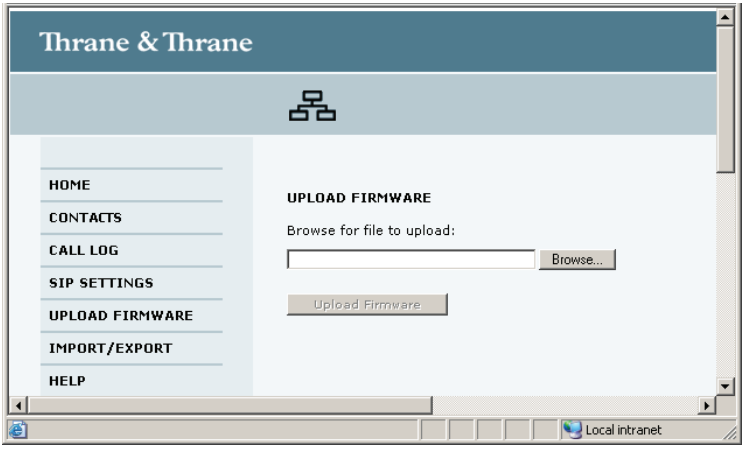
1. From the **Profile** scroll list select the profile you want to delete.
2. Click **Delete** at the bottom of the page.

Uploading firmware

You can use the web server to upload firmware from your computer to the IP Handset.

Do as follows:

1. Select **UPLOAD FIRMWARE** from the left navigation pane.



2. Click **Browse** and locate the firmware you want to upload to the IP Handset.
3. CLick **Upload firmware**.

   The handset initiates firmware upload, showing the progress in the display. When upload is done, the handset automatically restarts with the new firmware.

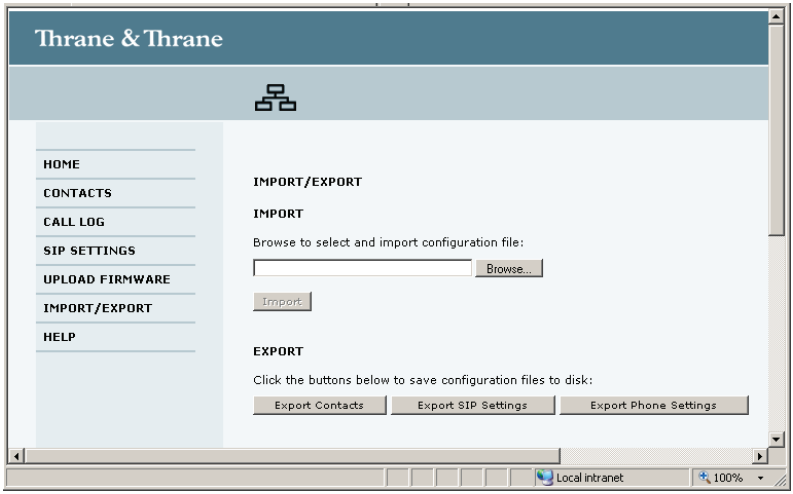
Note After uploading firmware to the handset, you may have to refresh your Internet browser for the web server to display correctly. To refresh the browser, press <shift>+<F5>.

Import/Export settings

Overview

You can import settings to your handset from a file, or export settings from the handset to a file. Using the settings files you can easily copy settings from one handset to another.

Select **IMPORT/EXPORT** from the left navigation pane.



To export settings

You may export a subset of the settings to a file as follows:

1. In the **IMPORT/EXPORT** page, click a button under **EXPORT** to create a settings file. You may export Contacts, SIP settings or Phone settings.
2. Click **Save**, browse to the location where you want the settings file, and click **Save** again.

The file is now saved in the location you specified.

To import settings

There are three types of settings file, each containing a subset of the handset settings. The name of the file indicates which settings are included in the file.

1. Click **Browse**.
2. Browse to the location where the settings file is saved and select the file you want to import.
3. Click **Open**.
4. Click **Import**.

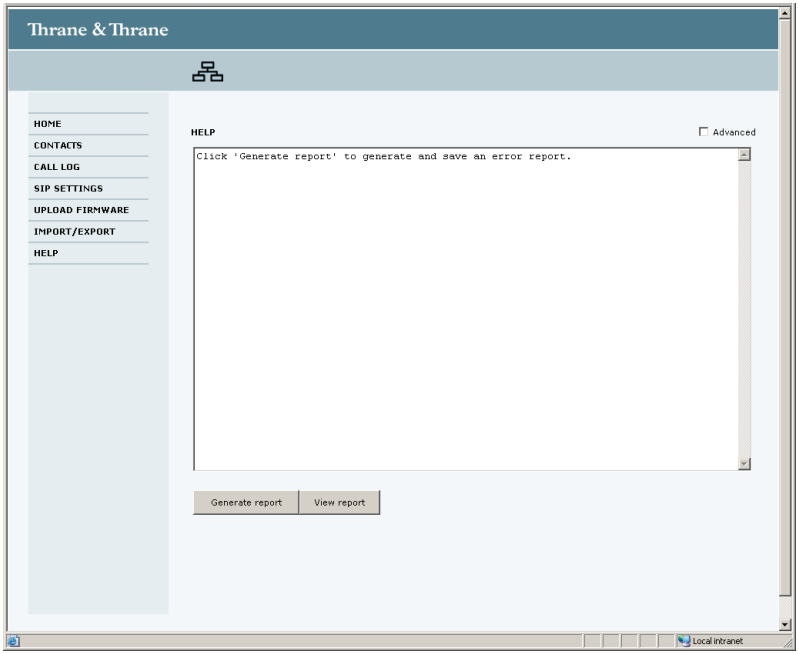
The settings in question are now replaced by the imported settings.

Help

If you are reporting an error with your IP Handset, you may be asked to generate a diagnostics report. The diagnostics report includes information that can be very useful for a service technician.

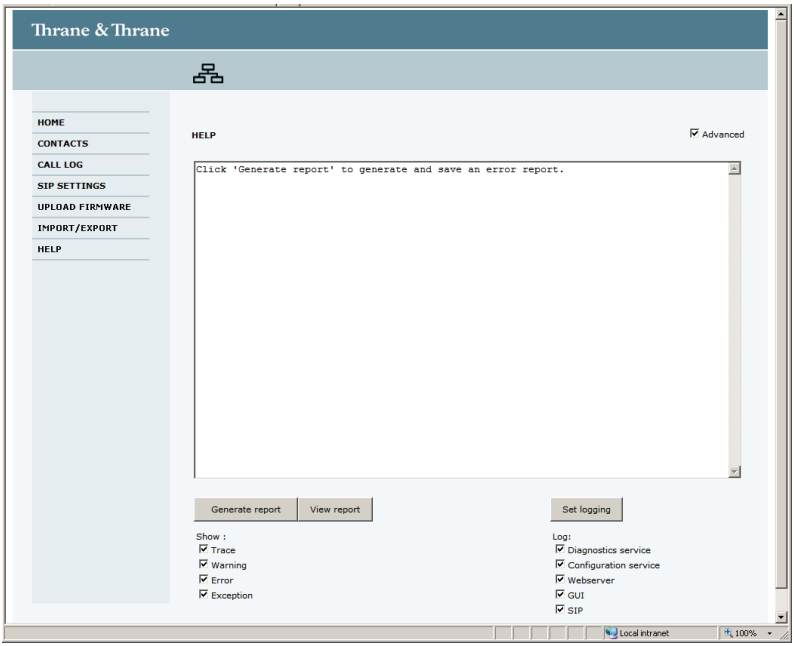
To generate a diagnostics report, do as follows:

1. Select **HELP** from the left navigation pane.



2. Click **Generate report**.

3. If your service technician needs specific information included in the report, click **Advanced** and select the items needed. Then click **Generate report**.



What's next?

This chapter has described how to use the built-in web server of the IP Handset.

The following chapter, *Troubleshooting*, describes how to troubleshoot errors in the handset, and how to get support if necessary.

Troubleshooting

In this chapter

This chapter gives guidelines for troubleshooting,

Getting support

If this manual does not provide the information required to solve your problem, you may want to contact your Airtime Provider or your supplier.

If you can see that the problem is related to airtime and not to your handset, please contact your Airtime Provider

If you need assistance with problems caused by the IP Handset, please call a distributor in your area. You may be asked to generate a diagnostics report. For information on how to generate a report, see *Help* on page 89.

An updated list of distributors is available on Thrane & Thrane's web site: www.thrane.com.

Troubleshooting guide

The below table provides information on some of the problems that might occur, including possible causes and remedies to solve the problems.

Problem	Possible Cause	Remedy
The handset is not responding to any keys pressed.	An error occurred in the software.	Press and hold the on hook key for at least 10 seconds to switch off the handset. Then switch on the handset again.
No connection to the BGAN network.	1) The PIN code has not been entered in the BGAN terminal, 2) There is an error in the terminal or the BGAN network.	1) Enter the menu system of the handset and select **BGAN > Enter PIN code**. For information on how to enter the PIN, see *Establishing a connection using BGAN terminal* on page 21. 2)See the manuals for the BGAN terminal for information on how to troubleshoot errors.
The handset shows “SIP fault”	No SIP profile is selected, the selected SIP profile is invalid, or the user name or password is wrong.	Enter the menu system and select **SIP** to see the selected profile. Change the profile or select another profile if necessary. For further information, see *SIP* on page 70.

Technical specifications

In this appendix

This appendix contains specifications and outline drawings for the wired IP Handset and cradle and the wireless IP Handset and cradle.

Thrane IP Handset, wired

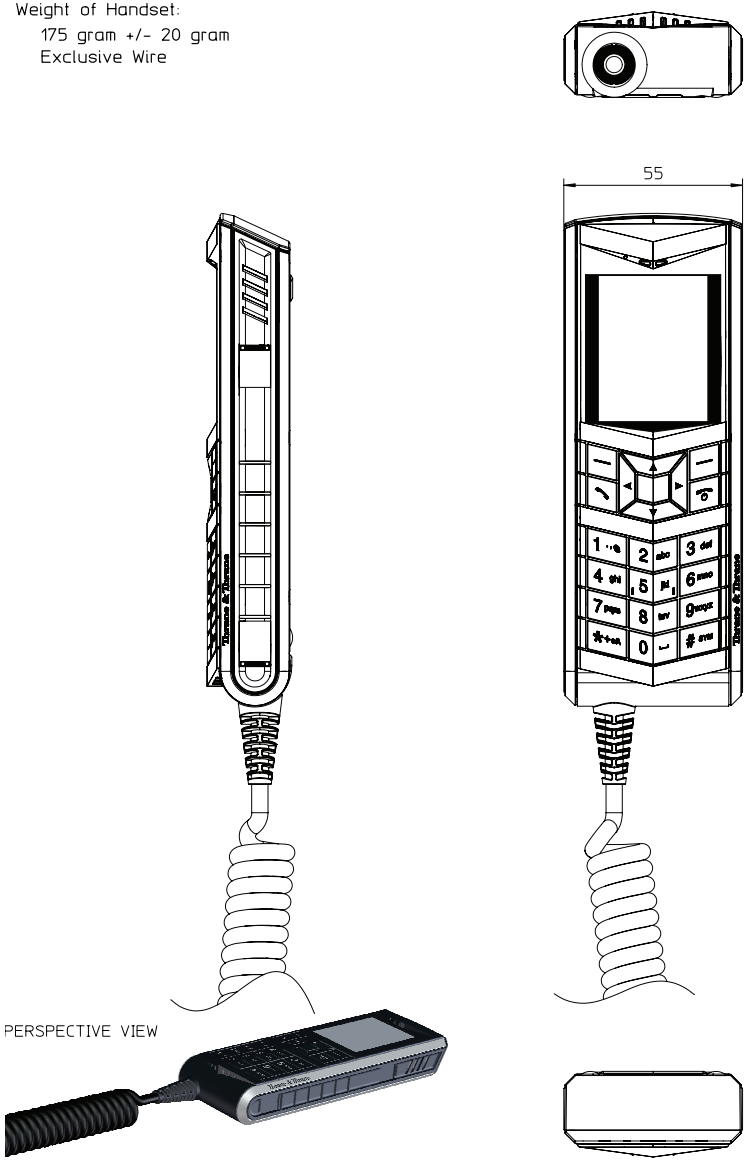
Specifications, wired handset

Item	Specification
Type	TT-3672A Thrane IP Handset, wired
Dimensions (L x B x H)	152 mm x 55 mm x 26.5 mm
Weight	175 g ±20 g
Display	2.2", 240 x 320 pixel TFT color LCD
Operating temperature	-25°C to +45°C
Storage and transport temperature	-25°C to +55°C
Humidity	Up to 95% without condensation
Air pressure, transport	4572 m AMSL

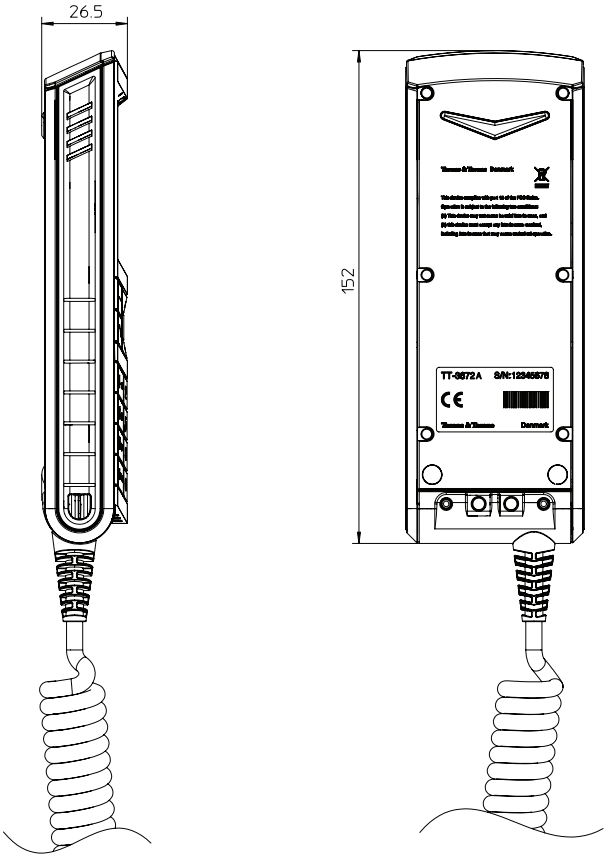
Item	Specification
Power	Power over Ethernet (PoE) class 2 (Alternative B of IEEE802.3af is not supported.)
Power consumption	Max. 7 Watt
Protection category	IP55, dust proof and splash proof
LAN interface	10/100 Mbps
Network Protocol	Internet Protocol (IP)
VoIP Protocol	SIP v2 Session Initiation Protocol (RFC3261), SDP (RFC2327)
Voice Codecs	G.711 and G.729 A/B
Physical interfaces	RJ-45 male connector on fixed cable Not currently used: Headset 2.5 mm jack and Mini-USB 5-pin
Certifications	FCC, CE

Outline dimensions, wired handset

Weight of Handset:
175 gram +/- 20 gram
Exclusive Wire



IP Handset, wired, outline dimensions, continued (side view and back view).



Thrane IP Handset, wireless

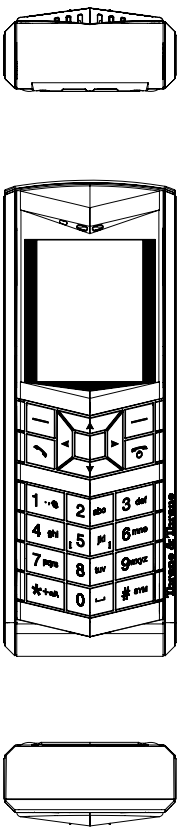
Specifications, wireless handset

Item	Specification
Type	TT-3672B Thrane IP Handset, wireless
Dimensions (L x B x H)	152 mm x 55 mm x 26.5 mm
Weight	175 g ±20 g
Display	2.2", 240 x 320 pixel TFT color LCD
Operating temperature	0°C to +45°C
Storage temperature	Long term (>6 months) -20°C to +25°C Short term (<6 months) -20°C to +45°C
Temperature, transport	-25°C to +55°C
Humidity	Up to 95% without condensation
Protection category	IP55, dust proof and splash proof
Air pressure, transport	4572m AMSL
Battery	Li-Ion 1900 mAh
Charge power (in cradle)	12-24 VDC, 7 Watt max
Standby time	Up to 72 hours

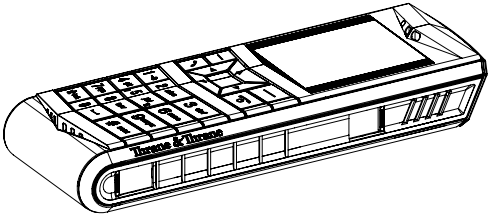
Item	Specification
Talk time	Up to 4 hours
Wireless network interface	Wireless Local Area Network (WLAN) according to 802.11b/g
Network Protocol	Internet Protocol (IP)
VoIP Protocol	SIP v2 Session Initiation Protocol (RFC3261), SDP (RFC2327)
Voice Codecs	G.711 and G.729 A/B
Physical interfaces	Headset 2.5 mm jack Mini-USB 5-pin (charging only)
Certifications	FCC, CE, IC, SAR

Outline dimensions, wireless handset

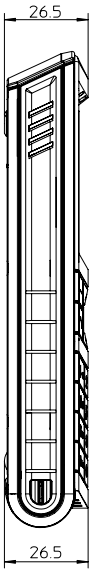
Weight of Handset:
175 gram +/- 20 gram

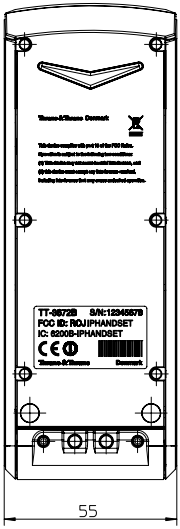


PERSPECTIVE VIEW



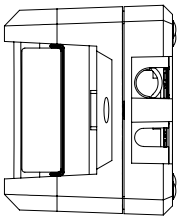
IP Handset, wireless, outline dimensions, continued (side view and back view).

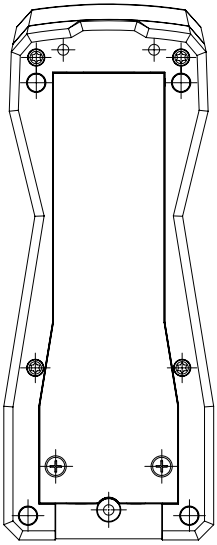


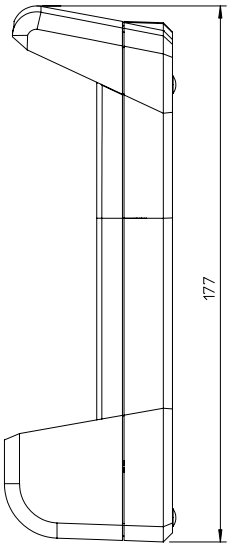


Thrane IP cradle outline dimensions

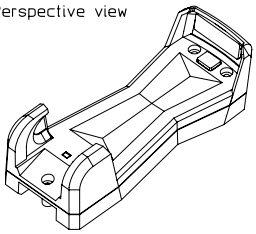
The below outline drawing applies to both the wired and the wireless variant.

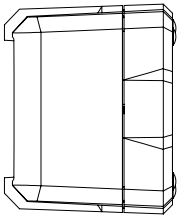




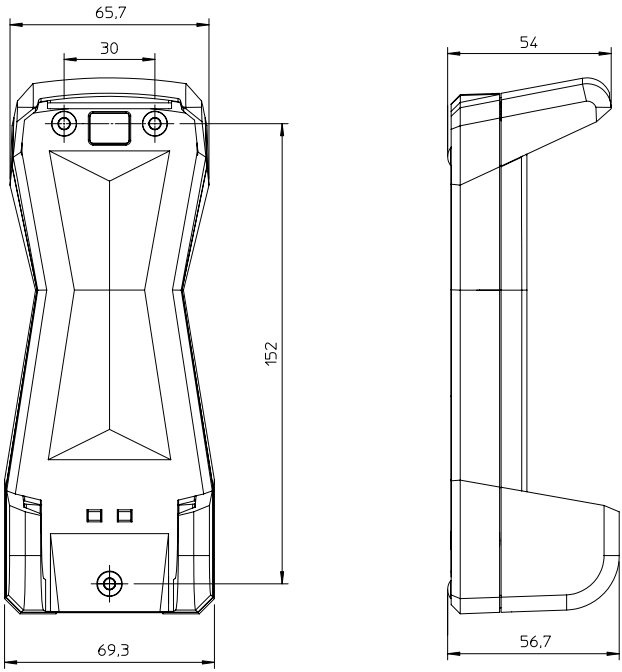


Perspective view





Thrane IP cradle outline dimensions, continued (front and side).



Conformity

Thrane IP Handset, wired

CE (R&TTE)

The Thrane IP Handset, wired, is CE certified (R&TTE directive). as stated in the "Declaration of Conformity with R&TTE Directive", enclosed in copy on the next page.

FCC

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Thrane & Thrane A/S

Declaration of Conformity with LVD and EMC Directives

The undersigned of this letter declares that the following equipment complies with the specifications of EC directive 73/23/EC concerning Low Voltage Safety and EC directive 89/336/EC concerning EMC.

Equipment included in this declaration

TT-3670A Thrane IP Handset & Cradle, wired:

TT-3672A Thrane IP Handset, wired	PN = 403672A
TT-3674A Thrane IP Cradle, wired	PN = 403674A

Equipment Applicability

The TT-3670A Thrane IP Handset is an IP telephone used worldwide for voice communication between the handset and a Thrane & Thrane BGAN terminal or any other IP terminal.

Declaration

The safety requirement with respect to the LVD directive 73/23/EC is met by conforming to the harmonized EU standards EN 60950-1. The protection requirement with respect to the EMC directive 89/336/EC is met by conforming to the harmonized EU standards EN 60945 and EN 55022.

Manufacturer

Thrane & Thrane A/S, Lundtoftegårdsvej 93D, DK-2800 Kgs. Lyngby, Denmark
Porsvej 2, DK-9200 Aalborg SV, Denmark

Place and Date

Kgs. Lyngby, 13. May 2008

CE

Walther Thygesen, CEO
Thrane & Thrane A/S

Doc. no. 99-127009-B

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T +45 39 55 88 00 · F +45 39 55 88 88 · info@thrane.com · www.thrane.com
Bank: Danske Bank · Comp.reg.: 65 72 46 18 · VAT: DK-20 64 94 46

Thrane IP Handset, wireless

CE (R&TTE)

The Thrane IP Handset, wireless, is in the process of being CE certified (R&TTE directive). The “Declaration of Conformity with R&TTE Directive” will be enclosed in copy at the end of this section when ready.

FCC

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

See also the FCC/IC Notice on the next page.

FCC/IC Notice

To comply with FCC radiation exposure requirements, use of this device for head body operational configurations is limited to tested configurations and approved by Thrane & Thrane A/S.

THIS MODEL DEVICE MEETS THE GOVERNMENT'S REQUIREMENTS FOR EXPOSURE TO RADIO WAVES.

Your wireless device is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health.

The exposure standard for wireless devices employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6W/kg. Tests for SAR are conducted using standard operating positions specified by the FCC with the device transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the device while operating can be well below the maximum value. Before a device model is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the limit established by the government-adopted requirement for safe exposure. The tests are performed in positions and locations (e.g., next to the head and body) as required by the FCC for each model. The FCC has granted an Equipment Authorization for this model device with all reported SAR levels evaluated as in compliance with the FCC RF emission guidelines. SAR information on this model device is on file with the FCC and can be found under the Display Grant section http://www.fcc.gov/oet/fccid after searching on FCC ID: ROJIP-HANDSET.

REPLACE THIS PAGE WITH THE DECLARATION OF CONFORMITY FOR Thrane IP Handset, wireless.

B

BGAN	Broadband Global Area Network. A mobile satellite service that offers high-speed data up to 492 kbps and voice telephony. BGAN enables users to access e-mail, corporate networks and the Internet, transfer files and make telephone calls.

C

CE	Conformitée Européenne. This term signifies that a CE certified product conforms to European health, environmental, and safety regulations. In short, it makes the product legal to be sold in the European Union.

D

DHCP	Dynamic Host Configuration Protocol. A protocol for assigning dynamic IP addresses to devices on a network. With dynamic addressing, a device can have a different IP address every time it connects to the network.
DNS	Domain Name Server. A system translating server names (URLs) to server addresses.

I

IEEE	Institute of Electrical and Electronics Engineers. IEEE is a non-profit organization and the world's leading professional association for the advancement of technology.
IMSO	International Maritime Satellite Organisation. An intergovernmental body established to ensure that Inmarsat continues to meet its public service obligations, including obligations relating to the GMDSS.
IP	Internet Protocol. The method or protocol by which data is sent from one computer to another on the Internet.

L

LAN	Local Area Network
LCD	Liquid Crystal Display

M

MAC	Media Access Control address. A hardware address that uniquely identifies each node of a network.

P

PCB	Printed Circuit Board
PIN	Personal Identification Number. A secret numeric password shared between a user and a system, used to authenticate the user to the system.
PoE	Power over Ethernet. A standard for combining power supply with transmission of data over the Ethernet. The source unit "injects" power into the Ethernet cable and the power is "picked up" at the connected device.
PUK	PIN Unblocking Key. An eight-digit code used to unblock a SIM card after three incorrect PINs have been entered. The PUK code is supplied with the SIM card.

Q

QVGA	Quarter Video Graphics Array. A popular term for a computer display with 320 × 240 resolution. QVGA displays are often seen in mobile phones, PDAs and some handheld game consoles.

S

SIM	Subscriber Identity Module.The SIM provides secure storing of the key identifying a mobile phone service subscriber but also subscription information, preferences and storage of text messages.
SIP	Session Initiation Protocol. An application-layer control (signaling) protocol for creating, modifying, and terminating sessions with one or more participants. Used e.g. for Internet telephony.

T

TFT	Thin Film Transistor. A display type using a number of individual display cells, each controlled by its own transistor.

U

UMTS	Universal Mobile Telecommunications System. One of the third-generation (3G) cell phone technologies, standardized by the 3GPP.
URL	Uniform Resource Locator. A name used to describe the address of a specific resource on the internet.
USB	Universal Serial Bus. A serial bus standard to interface devices.

V

VoIP	Voice over Internet Protocol. The routing of voice conversations over the Internet or through an IP-based network.

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TT-98-126059-C

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