

THRANE & THRANE IP HANDSET

A multitude of operational benefits



Flexibility is the driving force behind the Thrane & Thrane IP Handset. It is designed to offer a multitude of operational benefits at sea, on land and in the air. A choice of wired* or wireless models expands the possibilities for this sophisticated and incredibly user friendly multi-function IP handset.

With Thrane & Thrane's unrivalled experience in satcoms for sea, land and aerospace applications, you can be confident of both the quality of the equipment and the support behind it. The new Thrane & Thrane IP Handset benefits from this and continuous development ensures that new applications will be made available for it.

Take Control

The Thrane & Thrane IP Handset is capable of transforming Thrane & Thrane FleetBroadband, EXPLORER 727 and SwiftBroadband terminals into highly flexible multi-station voice and data solutions. The physical design combines form and function, with the result a truly next generation handset, with benefits such as:

- Easy to use
- Cell phone-like user interface
- Control and status of terminal hardware
- Seamless integration of phonebook
- Configuration via web interface
- Excellent audio quality
- Encrypted communication

These rugged new Plug-and-Play handsets are based on a fast 260 MHz processor running Windows CE 6.0, which ensures the user can take full control of the power of Thrane & Thrane's SAILOR 500 and 250 FleetBroadband, EXPLORER 727 and Aero-SB+ and Aero-SB Lite solutions.

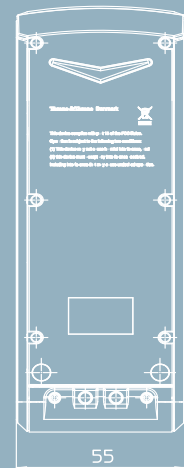
Focus on the user and the features they need is achieved through a highly intuitive user interface, tactile controls and the 2.2" TFT color screen, whilst technology such as a state-of-the-art echo canceller and noise suppression software ensures unmatched audio quality.

Secure Communications

Embedded crypto functionality makes secure peer-to-peer voice possible. The IP handset uses standard IP protocols, so secure calls can be made to any phone using these standards – not just Thrane & Thrane IP handsets. Secure calls can also be made via any IP network, at home or work, in airports or hotels. All crypto related functions (encryption, decryption, key generation, etc.) are performed by a dedicated secure 32-bit RISC ARM SecurCore microcontroller embedded in the handset. Standard X.509 certificate has been added for stronger authentication for closed user groups. The users own certificates can be easily implemented.

The Thrane & Thrane IP Handset is an important part of Thrane & Thrane's BGAN offering and promises to enable improved flexibility and the streamlining of your entire communications infrastructure.

* The wired handset can not be used for Aero solutions.



IP HANDSET, WIRELESS

Specifications

Certification	FCC, CE, IC, SAR
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Protocols

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

Interfaces

Physical interfaces	Headset 2.5 mm jack Mini-USB 5-pin (charging only)
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Environmental Conditions

Operation 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
Protection category	Dust proof and splash proof, IP 54
Air pressure, transport	4572m AMSL

Features

Display	2.2", 240 x 320 pixel TFT color
Battery	Li-Ion 1900 mAh
Charge power (in cradle)	12-24 VDC, 7 Watt max
Standby time	Up to 24 hours
Talk time	Up to 4 hours

IP HANDSET, WIRED

Specifications

Certification	FCC, CE
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Protocols

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

Interfaces

LAN interface	10/100 Mbps
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Environmental Conditions

Operation temperature	-25°C to +45°C
Storage temperature	-25°C to +55°C
Air pressure, transport	4572 m AMSL
Protection category	Dust proof and splash proof, IP 54

Features

Display	2.2", 240 x 320 pixel TFT color
Power	Power over Ethernet (PoE) class 2
Power consumption	Max. 7 Watt

IP HANDSET, WIRELESS AND WIRED

Crypto software protocols

SIP (RFC3261)
ZRTP (ID ver. 3)
SRTP (RFC3711)
X.509 (ITU-T)

Crypto software features

AES, 128-CTR Advanced Encryption Standard, 128bit key length, counter mode (FIPS pub 197)
DH3072, Diffie-Hellman mode with 3072 bit prime key generation algorithm (RFC 3526)
HMAC, Keyed-Hash Message Authentication Code (FIPS pub 198)
SHA1, Secure Hash Algorithm, 160 bit digest (FIPS pub 180-1)
SHA256, Secure Hash Algorithm, 256 bit digest (FIPS pub 180-2)
Encryption, up to 64 kbit continuous voice en- and decryption
Strong 3-way authentication based on the X.509 protocol

Crypto certificates

Standard X.509 certificate

Dimensions and Weight

Dimensions (L x B x H)	152 mm x 55 mm x 26.5 mm
Weight	175 g ± 20 g

Subject to change without further notice.

