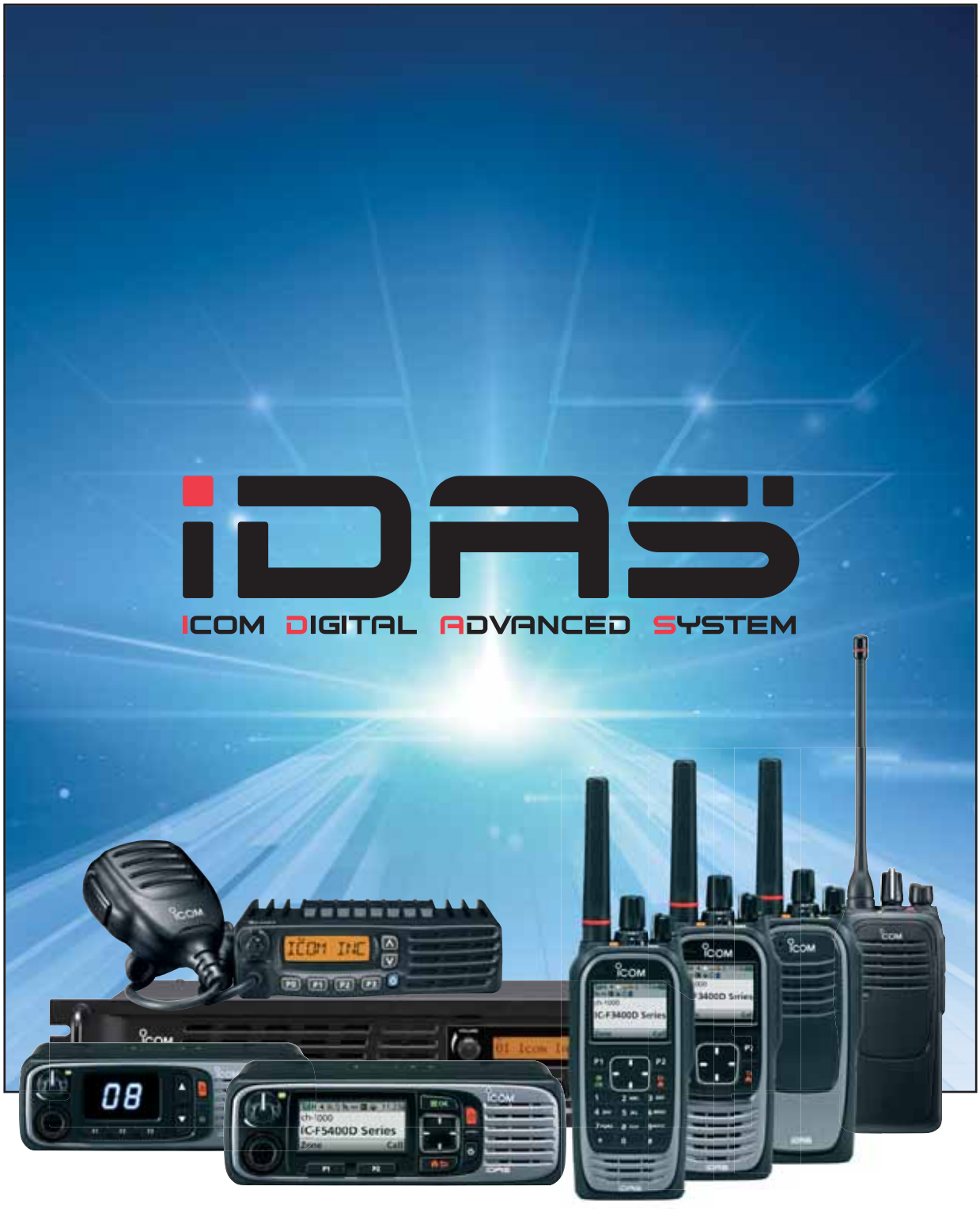
ICOM IDAS

DIGITAL RADIO COMMUNICATIONS



ICOM

ICOM

Icom Inc. manufactures wireless communication and is headquartered in Osaka, Japan. Icom was established in 1954 and has a long history as a trusted manufacturer of land mobile radios, amateur radio, marine radio, navigation products, aviation radio and receiver.

Icom is a rare example of a manufacturer that has chosen to not produce in low-cost countries. Icom has chosen to retain 100 % of production in Japan.

Icom is today a well-known brand and sells its products all around the world. The company's products are used by many companies and organization, such as The Ministry of Defence and Navy of the United States.

Count on us !

ICOM FRANCE

Established since 1976 in France at Toulouse, ICOM France is a subsidiary of ICOM INC.

Specialist in radio communications, ICOM FRANCE takes in charge the sales, customisations and after sales services of ICOM radios.

ICOM France has a network of dealers to assist his customers on the field and offer a premium services.

The Support desk manages the technical details of all products manufactured by ICOM and ICOM France, providing information and training for his clients.

The design and technical team manages the development of customised solution to fit the needs of professional customers.

One brand, one team, one goal,
Your satisfaction !

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IDAS

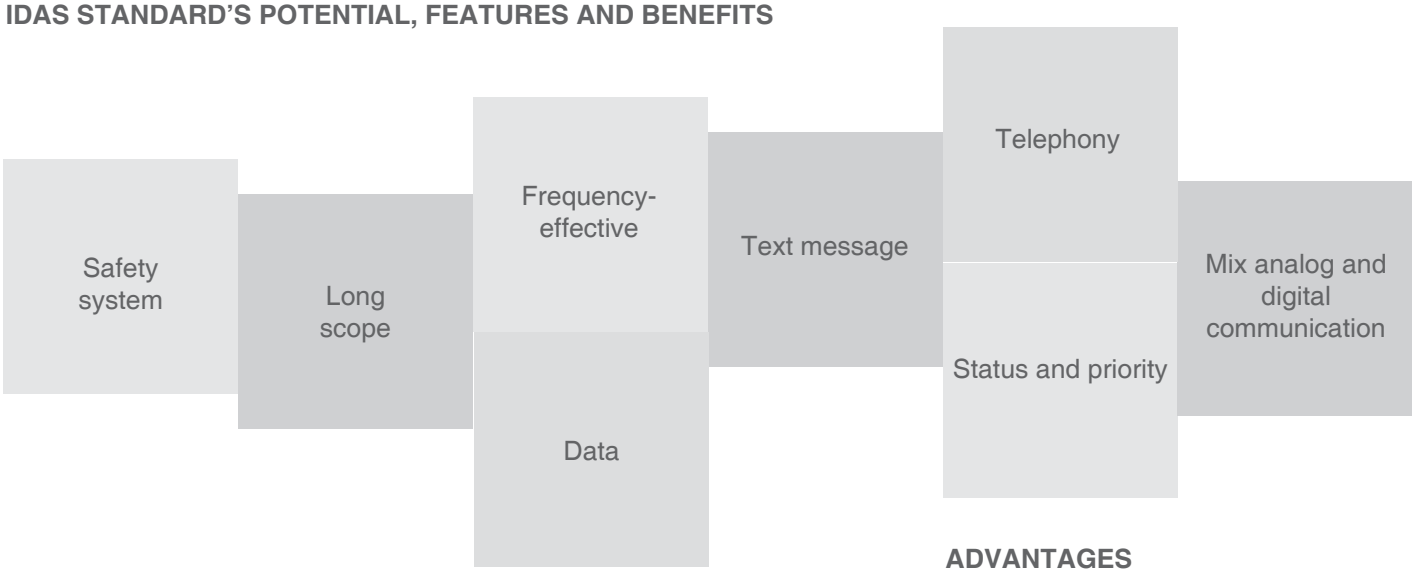
IDAS is Icom's digital radio system that you can easily customize to suit your needs. IDAS offers a complete system of hand-held radio stations, mobile stations, repeaters, IP-based control board, dispatcher, System Manager software and various accessories.

IDAS makes the transition from analog communications to digital communications easy

High audio quality, noise reduction, greater security and integrated data are all features implemented in the IDAS today. You can start with a conventional simple system and then add more sites or build a trunked system. IDAS trunking frequency is the most effective system on the market today.

IDAS is designed to make the transition to digital technology as smoothly as possible . No total shift is necessary which is usually required to begin using a digital system. IDAS radios can operate in analog / digital mode, so communication is not lost between your old radios and your new digital IDAS.

IDAS STANDARD'S POTENTIAL, FEATURES AND BENEFITS

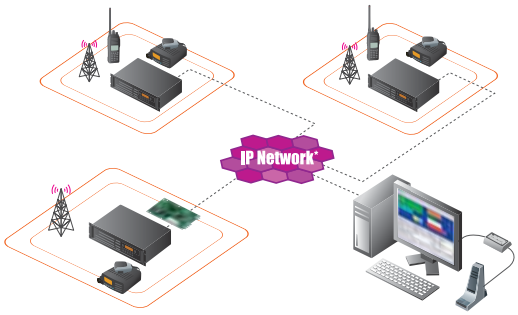


ADVANTAGES

- Scalable solution
- Long range
- Flexible to manage and control
- Cost effective communication
- Excellent price / performance solution
- Easy operation

IDAS is a complete digital radio solution that can be used for both small and large needs at a reasonable cost. IDAS works with all its benefits also in the simplicity of two radios and can be expanded to a large-scale system with multiple trunked base stations on a large geographical area.

IDAS RADIO NETWORK WITH UP TO 16 REPEATERS



IP-Based IDAS radiosystem

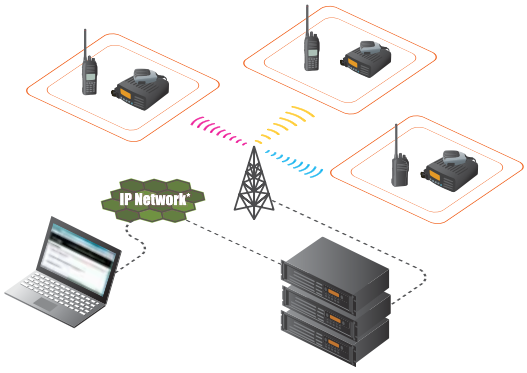
A multi-site IP-based system with IDAS allows a wide geographical coverage at a reasonable cost. Everyone can hear everyone and communicate with each other. This is the simplest form of IDAS radio system with more than one up to 16 repeaters.

Area of use

Suitable for users who need a system with a good geographical reach and a simple operation.

Suitable from small customers to large surfaces, taxi companies, industries, municipalities in small town or even companies with multiple offices.

IDAS DIGITAL TRUNKING WITH UP TO 32 CHANNELS



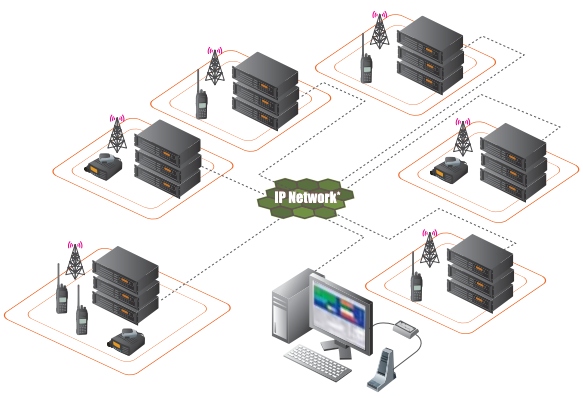
IDAS trunking radiosystem

A trunked radio system with IDAS enables you to have a user-friendly and efficient system frequency. You will automatically be assigned a channel from the system without making an active choice. You can also have multiple independent groups or companies under the same system.

Area of use

Perfect system for many users in a small geographic area. Can also be used when multiple user groups or business want to share a system. Potential users can be taxi companies, an industries, sports arena.

IDAS DIGITAL TRUNKING MULTISITE RADIOSYSTEM WITH UP TO 62 CHANNELS PER SITE AND 60 000 USERS



IDAS trunking multisite radiosystem

A multisite trunked radio system is an efficient and powerful system where you can customize each system location for the amount of traffic and users you have in each location. The system can handle up to 60,000 users on 48 radio sites which makes the system powerful enough for most user groups.

Area of use

Allow to grow with users from a small, flexible networks to a very powerful radio system. With features such as roaming and priority in the system, it answer to most people's needs for flexibility and security. Potential users can be bus companies, major industries, municipal systems.

F3400D-serie

Introducing ICOM's new generation of IDAS digital business radios. This smart new series incorporates cutting edge design, superb performance and a comprehensive range of sophisticated features all on a flexible, upgradable multi-protocol platform. Icom manufacturing refinements and enhancements have not only reduced the size of the radios but have provided new functions and enhanced performance. The electrical and industrial hardware improvements provide an adaptable radio solution for your organisation that is easy to use whatever the working environment you may be operating in.

IC-F3400D (VHF)
IC-F4400D (UHF)

IC-F3400DS (VHF)
IC-F4400DS (UHF)

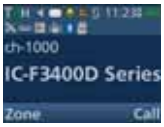
IC-F3400DT (VHF)
IC-F4400DT (UHF)

Small, Slim and Smart

New engineering techniques including the use of a custom SoC (System-on-a-Chip) and flat sheet keypad have made radios body as compact as possible.

High-Resolution Color LCD

The high-resolution colour LCD provides great visibility in both natural and indoor lighting. A night mode LCD setting is available for use at night or in low lighting conditions.



DES/AES Encryption with OTAR

For digital communication security, the radios provide basic 4-key DES encryption as standard. When used with the optional UT-134 encryption unit, 256-bit AES encryption and the OTAR function are available. The OTAR function allows updating of encryption keys over the radio channel.

OTAP and OAA

For efficiency in radio programming, the OTAP (Over-the-Air-Programming) function allows remote change of programming data (for example adding a new repeater) over the radio channel. The OAA (Over-the-Air-Alias) function sends user name over the radio channel and eliminates needs to program the alias table. Successfully manage your fleet with ease.

Built-in Bluetooth

The built-in Bluetooth module provides remote operation and hands-free communication paired with a third-party Bluetooth headset. When connected with Bluetooth telemetric devices or PC terminals, data or files can be wirelessly transferred.

Digital Voice Recording

The radios can record incoming and outgoing communications, and replay recorded communications. When a 32 GB microSD card is used, a Max. 500 hours recording is possible. The recorded audio is saved in “wav” format and allows replay on the radio or a PC.

Motion/Stationary Detection Sensors

An emergency button and five emergency-related functions are incorporated (man down, motion detection, stationary detection, lone worker and power OFF emergency functions). The motion/stationary sensor sensitivity level is programmable in 10 levels for each function.

Multiprotocol

F3400-serie can operate in dPMR, NXDN, P25 and analog mode.

USB connection

The new IDAS devices can be connected to a computer via a USB port for programming or to access data on the installed micro SD card.

Transparent Data Modem Facility

The radios can be used as a transparent data modem which transmits various data at 9600 bps over the radio channel using 12.5 kHz channel spacing.

ANC (Active Noise Canceling)

The ANC assists in providing clear comment. Some specified noise sources (such as sirens or boiler noise) can be cancelled.

Waterproof and Dustight IP68 with AquaQuake™

The handheld radios in this range are IP68. They also incorporate an AquaQuake draining function by emitting a vibrating buzz sound.

GPS Receiver

Position data can be sent with voice call or status call and can be used with an AVL (Automatic Vehicle Location) system. The GPS log functions log user position data at regular intervals and can be saved to a microSD card. The radios can show direction and distance to another radio or specified point, and notify you with a beep sound if the target is in the specified range.

GENERAL FEATURES

- 136-174 MHz, 380-470 MHz wide frequency coverage
- 1024 memory channels with 128 zones
- 14-pin ACC connector with BTL amplifier output
- VOX (Voice Operated transmission) function
- Internal clock
- IDAS conventional and multi-site conventional
- Single-site trunking and multi-site trunking
- Analogue/Digital conventional mixed mode operation
- Status • Text message
- 5 tones, CTCSS, DTMF
- Audio compander
- Inversion voice scrambler

ACCESSORIES

ANTENNA

380-430 MHz

FA-S81U

430-480 MHz

FA-S82U

400-450 MHz
Short antenna

FA-S81US

450-490 MHz
Short antenna

FA-S82US

136-150 MHz
Short antenna

FA-S81VS

148-160 MHz
Short antenna

FA-S82VS

160-174 MHz
Short antenna

FA-S83VS

136-150 MHz

FA-S81V

148-160 MHz

FA-S82V

160-174 MHz

FA-S83V

CAR

Dock + charger

CP-SR89264

Dock for car

MB-SR89265

BATTERY

Li-Ion battery 7.2 V
2000 mAh, 10h

BP-283

Li-Ion battery 7.2 V
3000 mAh, 16h

BP-284

CHARGER

Rapid charger

BC-219SE

Multi-charger

BC-214 #8

Adapter for charger

AD-132

HAND MICROPHONE

Robust with alarm button,
3,5 mm outlet

HM-222

Compact, with alarm button,
3,5 mm outlet

HM-SR29479

Ear hose,
3,5 mm outlet

HS-SR29206

Ear hose, FabricLine
3,5 mm outlet

HS-SR29236

C-ring, 50 cm cable,
3,5 mm outlet

HS-SR29148

D-ring, 30 cm cable,
3,5 mm

HS-SR29149

HEADSET

Bluetooth headset

HS-SR30315

2-wire mic for ear

HS-SR29191

4 -in-one headset for Icom 14 -pin accessory connector. The headset has a microphone with call button on the cable. The cable has a 2 pin connector that fits directly into Peltor headset . Supplied with 3 different listening options air hose, D-ring or C- ring

HS-SR29133

BUILD YOUR OWN SOLUTION

1
Your radio

With our universal solutions connected to your radio, you can personally control the headset solution you want to use.

2
Select PTT solution

Choose from three different PTT solutions. If you want a rugged PTT, select the robust PTT box.

2G, 2,5 mm, 2x wire-less PTT

VS-SR29487

Midsize, 25SA, Hi/lo-switch

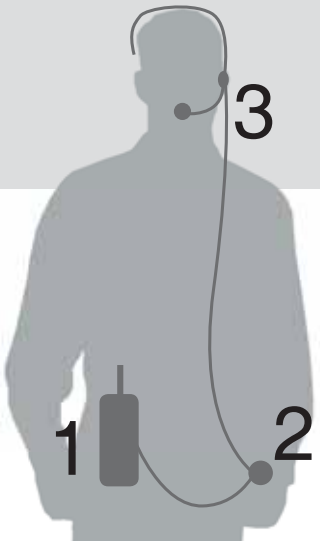
VS-SR71618

VOX & PTT, 2,5 mm fem

VS-4 MC

3
Select headset solution
(2.5 mm 3-pin socket)

Choose from a variety of audio accessories to suit the PTT solution of your choice. The flexibility of the system allows you to have different solutions depending on what tasks you have during the day.



Ear hook type

HS-94

Behind the head type

HS-95

Throat type

HS-97

Phonak, with 2,5 mm jack

HS-SR72216

25L, headset with inline mic, c-ring

HS-SR29228

Headset with inline mic, c-ring

HS-SR29226

Stereo headset

HS-SR60301

iPhone5-type, 25 mm contactk

HS-SR60222

Headset with speaker

HS-SR72240

Lightweight headset

HS-SR64328

LEATHER CASE

Leather case for F3400DT/DS

LC-184

Leather case for F3400D

LC-186

bag for 6 radios

LC-SR91017

OTHER

Programming cable handle to mobile

OPC-2362

Programming cable

OPC-1862

AES-DES (NXDN) encryption unit

UT-134

BELT CLIP

Alligator type

MB-133

Swive type

MB-136

SOFTWARE

Article	Description
CS-F3400	Programming software
CS-KLD1	Encryption key loader
CS-OTPM1	OTAP manager software
IDAS NXDN	AES license
IDAS NXDN	OTAR license
IDAS NXDN	Trunking uppgrading Type-D single site
IDAS NXDN	Trunking uppgrading Type-D multi site
IDAS DPMR	dPMR mode 3 upgrade
P25	P25 activation
TBD	Bluetooth activation
TBD	Memory channel expansion (2000ch)
TBD	Memory channel expansion (4000ch)
TBD	SD card slot functionallity activation
TBD	Dealer set mode

F1000D-serie

IC-F1000D serie and IC F2000D is Icom minimum professional radio series combining properties such as low weight (240 g) and a smart ergonomic design of a robust IP67 shell.

Compact

The IC-F1000D/F2000D has a compact 52.2×111.8×30.3mm body and weighs only 260g (with BP-280 battery pack and belt clip). It's easy to carry around anywhere. F1000D is for VHF (136-174 MHz) frequency band and F2000D UHF (400-470 MHz). The terminals have no display.

Easy to hear

The large 36mm speaker of the transceiver provides clear 800mW audio. The built-in BTL amplifier increases the audio output power and delivers loud and intelligible voice to a radio opérator working in noisy environments.

IC-F1000D (VHF)
IC-F2000D (UHF)

Multiprotocol

F1000D-serie can operate in dPMR, NXDN and analog mode.

IP67-waterproof

While the body is compact, the IC-F1000D/ F2000D has rugged construction providing superior protection against water (1m depth for 30 minutes), dust, sand, mud and other objects. The radio is also tested to MIL-STD 810 specifications. It can with- stand harsh use.

IDAS

Analogue/Digital conventional mixed mode

Channel announcement

A voice message indicates the channel selected.

Man Down

The radio sends Man Down alarm when the radio is "lying down" a predetermined time

Lone Worker

The radio sends Lone Worker alarm when no activity (keystroke) occurred at a predetermined time.

Scrambler

Built-in voice scrambler enabling encrypted communication.

Compander

This function reduces the noise when receiving weak signals, and boosts the operator's voice when transmitting.

Other

- VOX capability
- Surveillance function (no led - no sound)
- Siren alarm
- 5 Tones, UN 10 Tones and CTCSS

KEY FEATURES

- Compact size
- Good audio
- Channel announcement
- Waterproof IP67 (1 m for 30 min.)
- Man down alarm

ACCESSORIES

ANTENNA

150-174 MHz

FA-SC55V

430-470 MHz

FA-SC57U

160-174 MHz

FA-SC57VS

450-490 MHz

FA-SC73US

BATTERY AND CHARGER

Battery Li-Ion
7.2 V / 1485 mAh

BP-279

Battery Li-Ion
7.2 V / 2280 mAh

BP-280

Rapid charger

BC-213

Multi-charger

BC-214

MICROPHONE

GPS
speaker michophone

HM-171GPW

IP-67 waterproof
speaker-microphone

HM-168LWP

Microphone with
alarm button

HM-SR29580

CAR

Dock + charger

CP-SR89282

Dock for car

MB-SR89283

HEADSET AND EARPHONE

Headset, behind the head type

HS-SR29261

Headset, telefone type

HS-SR29264

4 in 1 for Peltor and iphone black PTT

HS-SR29140

D-shape, 30 cm cable, 3,5 mm

HS-SR29149

Air hose FabricLine 3,5 mm uttag

HS-SR29236

Earhook headset with boom mic

HS-94LWP

Behind the head type

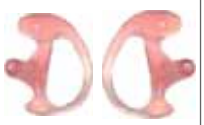
HS-95LWP

HS-153LA

EARPHONE

Earfly insert 3-pack left / right

HS-SR60178/60179



Open Ear insert 3-pack, left / right

HS-SR60278/60279

Earplug accoustic

HS-SR60255

Plug for air hose

HS-SR72242

CLIP

Beltclip

MB-133

BUILD YOUR OWN SOLUTION

1
Your radio

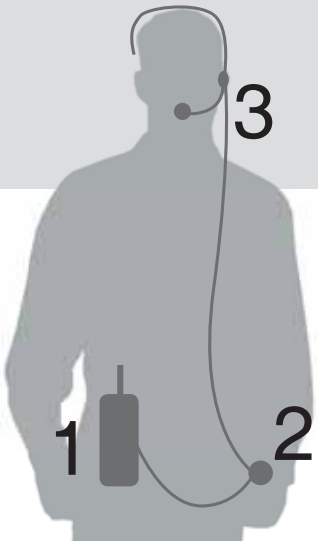
With our universal solutions connected to your radio, you can personally control the headset solution you want to use.

2
Select PTT solution

Choose from three different PTT solutions. If you want a rugged PTT, select the robust PTT box.

3
Select headset solution
(2.5 mm 3-pin socket)

Choose from a variety of audio accessories to suit the PTT solution of your choice . The flexibility of the system allows you to have different solutions depending on what tasks you have during the day.



25LA, robust PTT

VS-SR29157

Ear hook type

HS-94

Behind the head type

HS-95

Throat type

HS-97

Wireless PTT, 2,5 mm

VS-SR29472

headset with inline mic, c-ring

HS-SR29226

25L, headset with inline mic, c-ring

HS-SR29228

VOX & PTT, 2,5 mm

VS-4LA

iPhone5-type, 25 mm contactk

HS-SR60222

Headset with speaker

HS-SR72240

F29DR

F29DR is a digital licence-free radio with professional level durability. The 29DR is available with 16 digital channels and utilises 6.25 kHz narrow channel spacing. Even in urban areas where analogue PMR446 users often experience channel congesiton, digitial channels offer less interference.

Dual mode

The F29DR can be used in both digital and analogue mode at the same timeand can scan both zones at once. This allows an orgnaisation to operate both digital and analogue radios in their fleets.

Multiprotocol

F29DR can operate in dPMR and analog mode.

IC-F29DR

IP67-dust-tight and waterproof

The F29DR can withstand 1 m depth of water for 30 minutes. This rugged construction provides dust-tight protection making it suitable for outdoor use.

Channel announcement

A voice message indicates the channel selected.

VOX

With optional headset, built-in VOX function provides convenient hands-free operation.

Voice announcement function

When you rotate the rotary selector, the radio announces the selected channel number. The radio also announces the zone number and mode when the zone button is pushed.

Group call

Digital common ID can be used for a group call. These codes and ID can be programmed to the 16 position rotary selector for instant call capability.

12 types of ring tone

The call-ring function allows you to call your group members with 12 types of ring tone. When you prearrange any ring tone for an emergency, the ring tone can be used for an emergency alert.

Other

- VOX capability
- Outsanding audio quality
- Scan features

KEY FEATURES

- Compact size
- Good audio
- Channel Alert
- Waterproof IP67 (1 m for 30 min.)

ACCESSORIES

CAR

Dock + charger

CP-SR89282

Dock for car

MB-SR89283

BATTERY AND CHARGER

Battery Li-Ion
7.2 V / 1485 mAh

BP-279

Battery Li-Ion
7.2 V / 2280 mAh

BP-280

Rapid charger

BC-213

Multi-charger

BC-214

MICROPHONE

GPS
speaker microphone

HM-171GPW

IP-67 waterproof
speaker-microphone

HM-168LWP

Microphone

HM-PR1

HEADSET AND EARPHONE

Headset, behind the head type

HS-SR29261

Headset, telefone type

HS-SR29264

4 in 4 for Peltor and iPhone black PTT

HS-SR29140

D-shape, 30 cm cable, 3,5 mm

HS-SR29149

Air hose FabricLine 3,5 mm uttag

HS-SR29236

Earhook headset with boom mic

HS-94LWP

Behind the head type

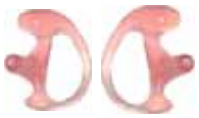
HS-95LWP

HS-153LA

EARPHONE

Earfly insert 3-pack left / right

HS-SR60178/60179



Open Ear insert 3-pack, left / right

HS-SR60278/60279

Earplug accoustic

HS-SR60255

CLIP

Beltclip

MB-133

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2
Select PTT solution

Choose from three different PTT solutions. If you want a rugged PTT, select the robust PTT box.

25LA, robust PTT

VS-SR29157

Wireless PTT, 2,5 mm

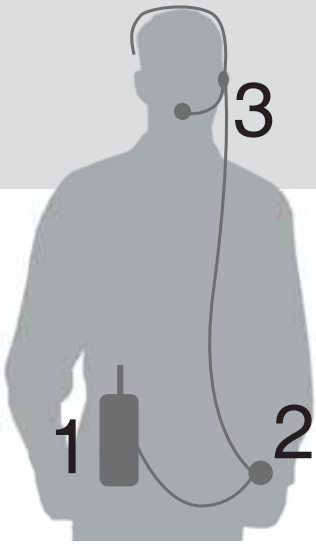
VS-SR29472

VOX & PTT, 2,5 mm

VS-4LA

3
Select headset solution (2.5 mm 3-pin socket)

Choose from a variety of audio accessories to suit the PTT solution of your choice . The flexibility of the system allows you to have different solutions depending on what tasks you have during the day.



Ear hook type

HS-94

Behind the head type

HS-95

25L, headset with inline mic, c-ring

HS-SR29228

headset with inline mic, c-ring

HS-SR29226

iPhone5-type, 25 mm contactk

HS-SR60222

Headset with speaker

HS-SR72240

F3202DEX serie

IC-F3202DEX and IC-F4202DEX are IDAS intrinsically safe radio. This model is designed and certified to be used in ATEX environement.

IP67-dust-tight and waterproof

The IC-F3202DEX series provides rugged protection against dust and water that is equivalent to IP67. The IC-F3201DEX series can withstand 1m depth of water for 30 minutes and its dust-tight construction shuts out powder dust, sand and other objects.

Channel announcement

A voice message indicates the channel selected.

Man Down

The man down function automatically sends an emergency signal when the transceiver is left in a horizontal position for a preset period.

IC-F3202DX (VHF)
IC-F4202DX (UHF)

Multiprotocol

F3202DEX serie can operate in dPMR and analog mode.

Lone Worker

The lone worker function can transmit an emergency signal when the radio is not operated for a preset period.

IEC Certifications

Mining : Ex ib I Mb
Gas : Ex ib IIC T4 Gb
Dust : Ex ib IIIC IP6x T110°C Db
–20°C≤Ta≤+55°C

ATEX Certifications

Mining : I M2 Ex ib I Mb
Gas : II 2G Ex ib IIC T4 Gb
Dust : II 2D Ex ib IIIC IP6x T110°C Db
–20°C≤Ta≤+55°C

KEY FEATURES

- Compact size
- Good audio
- Alarm button
- Waterproof IP67 (1 m for 30 min.)
- Motion alarm

ACCESSORIES

ANTENNA

136-150 MHz

FA-SC25V

150-174 MHz

FA-SC55V

400-430 MHz

FA-SC25U

430-470 MHz

FA-SC57U

BATTERY AND CHARGER

Battery IP67 Li-Ion
7.4 V / 1900 Ah

BP-277EX

Rapid charger

BC-212EX

MICROPHONE

IP-67

HM-203EX

BELTCLIP

Belt Clip Atex

MB-94EX

F5400D-serie

Introducing ICOM's new generation of IDAS digital business radios. This smart new series incorporates cutting edge design, superb performance and a comprehensive range of sophisticated features all on a flexible, upgradable multi-protocol platform. Icom manufacturing refinements and enhancements have not only reduced the size of the radios but have provided new functions and enhanced performance. The electrical and industrial hardware improvements provide an adaptable radio solution for your organisation that is easy to use whatever the working environment you may be operating in.

IC-F5400D
IC-F6400D

IC-F5400DS
IC-F6400DS

High-Resolution Color LCD

The high-resolution colour LCD provides great visibility in both natural and indoor lighting. A night mode LCD setting is available for use at night or in low lighting conditions.

DES/AES Encryption with OTAR

For digital communication security, the radios provide basic 4-key DES encryption as standard. When used with the optional UT-134 encryption unit, 256-bit AES encryption and the OTAR function are available. The OTAR function allows updating of encryption keys over the radio channel.

Built-in Bluetooth

The built-in Bluetooth module provides remote operation and hands-free communication paired with a third-party Bluetooth headset. When connected with Bluetooth telemetric devices or PC terminals, data or files can be wirelessly transferred.

Digital Voice Recording

The radios can record incoming and outgoing communications, and replay recorded communications. When a 32 GB microSD card is used, a Max. 500 hours recording is possible. The recorded audio is saved in “wav” format and allows replay on the radio or a PC.

Transparent Data Modem Facility

The radios can be used as a transparent data modem which transmits various data at 9600 bps over the radio channel using 12.5 kHz channel spacing.

ANC (Active Noise Canceling)

The ANC assists in providing clear comment. Some specified noise sources (such as sirens or boiler noise) can be cancelled.

Multiprotocol

F5400D-serie can operate in dPMR, NXDN, P25 and analog mode.

Audio Equalizer

The Audio equalizer allows you to tailor the audio tone to suit speech characteristics and the language in use. Five types of tone controls are available. The AGC (audio auto gain control) function controls the speech audio to a constant, regardless of the input magnitudes of the voice or distance of the microphone from the mouth.

GPS

Position data can be sent over your radio station or logged at regular intervals and can be saved to a microSD card . IDAS-devices can also display the direction and distance to another radio or specified position .

USB connection

The new IDAS devices can be connected to a computer via a USB port for programming or to access data on the installed micro SD card.

GENERAL FEATURES

- 136-174 MHz, 380-470 MHz wide frequency coverage
- 1024 memory channels with 128 zones
- VOX-function (Voice Operated transmission)
- IDAS conventional and multi-site conventional
- Single-site trunking and multi-site trunking
- Analogue/Digital conventional mixed mode operation
- Status • Text message
- DTMF autodial and DTMF decode
- 5 tones
- Audio compander
- Inversion voice scrambler

ACCESSORIES

BASE STATION

Table handset, speaker and power supply

PS-SRQ3-16

13,8VDC 9A

PS-ADF5060

COMMANDMIC

Secondary remote control microphone for RMK-5.
Options for IC-F5400D/F6400D only.

HM-218

Separation kit

RMK-5

Dual headkit

RMK-7

Article	Description
OPC-2373	Separation cable Commandmic 1,9 m
OPC-2374	Separation cable Commandmic 8 m

Article	Description
82008	Mounting kit for DIN
OPC-2364	OPC-2365 Separationskabel RMK 1,9 meter
OPC-2365	OPC-2365 Separationskabel RMK 3 meter
OPC-2366	OPC-2366 Separationskabel RMK 5 meter
OPC-2367	OPC-2367 Separationskabel RMK 8 meter

MULTIPLE CONTROLLER CONFIGURATIONS

With a combination with optional separation kits, COMMANDMIC and separation cables, three types of controller configurations are available to suit almost any application or installation that may be required. The intercom function is available between controllers and/or COMMANDMIC

A detached controller head with the separated RF unit is a simple to install in almost any vehicle.

Suitable for double cab vehicles. Install the controller head to front and rear seats respectively.

The COMMANDMIC is handy for installing a work platform on the rear part of the vehicle.

MICROPHONE

Heavy duty microphone

HM-220

Heavy duty DTMF microphone

HM-220T

Simple microphone

HM-221

DTMF Microphone

HM-221T

Desktop microphone

SM-29

SPEAKER

External speaker 20 W

SP-30

External speaker 2 m cable

SP-35

External, 6 m cable

SP-35L

OTHER

DC-cable

OPC-345

AES/DES encryption

UT-134

SOFTWARE

Article	Description
CS-F3400	Programming software
CS-KLD1	Encryption key loader
CS-OTPM1	OTAP manager software
IDAS NXDN	AES license
IDAS NXDN	OTAR license
IDAS NXDN	Trunking uppgrading Type-D single site
IDAS NXDN	Trunking uppgrading Type-D multi site
IDAS DPMR	dPMR mode 3 upgrade
P25	P25 activation
TBD	Bluetooth activation
TBD	Memory channel expansion (2000ch)
TBD	Memory channel expansion (4000ch)
TBD	SD card slot functionallity activation
TBD	Dealer set mode

F5122D-serie

IDAS compatible mobile station in a compact format for both analog and digital communications. The radio is easy to use and provides access to a number of interesting features.

Built-in 2-Tone and 5-Tone (Analogue mode)

2-Tone and 5-Tone signalings give you selective calling, quiet stand-by and other convenient functions with programming. The stun/kill functions disable a radio over the air and the revive function restores the stunned radio.

Scanning features

The priority scan allows you to monitor one or two priority channels while scanning other non-priority channels. The TX channel and talk back functions allow you to make a quick response while scanning.

128 channels with 8 zones

An ample 128 channel capacity allow most companies plenty of room to grow. Up to 8 zones lets you group together channels in logical fashion.

Robust

The tough aluminum die-cast chassis and polycarbonate front panel have been tested to MIL standard 810F specifications.

Multiprotocol

F5122D-serie can operate in dPMR, NXDN and analog mode.

Large programmable buttons

Programmable P0-P3 buttons provide easy access to frequently used functions. Buttons and LCD display are backlit for night time operation.

Powerful, front-facing speaker

4 watts (typ.) front facing speaker delivers clear and loud audio throughout a vehicle's cabin. Digital modulation adds distinct clarity to received voices.

Compact hand microphone

Select from 5 levels of mic gain, for clearer transmission.

Optional accessory cable

An external GPS receiver, PC or other device can be connected with the optional OPC-2078 (D-sub 25-pin) or OPC-1939 (D-sub 15-pin).

8-character LCD

An 8-character alphanumeric LCD with user-friendly icons shows a variety of information and operating status such as caller's name, received message, etc

KEY FEATURES

- IDAS and analog communications
- Mixed digital and anlog mode
- Built-in 5tones, CTCSS, DTCS
- 128 channels
- MIL-STD-810F
- Front-facing speaker
- Compact size for easy installation

IC-F5122D (VHF)
IC-F6122D (UHF)

ACCESSORIES

HOLDER

Charger

BC-SR30390

Hands free mic

HM-30391

SPEAKER

External speaker
5 W

SP-22

External speaker
7 W

SP-24

MICROPHONE

Microphone

HM-152

DTMF Microphone

HM-152T

Desktop microphone

SM-26

OTHER

Scrambler

UT-110R

13,8 VDC 9 A

PS-ADF5060

DC-cable

OPC-345

FR5100-serie

The IC-FR5100 and the IC-FR6100 handle both analog and digital IDAS communication. The repeater has a compact design and fits directly into a standard 19 inch rack. It also has the option to place an additional repeater module UR-FR5100 / 6100 which provides two channels in the same unit.

IDAS

The repeater has builtin IDAS functionality which provides the ability to migrate to digital communications.

Two RF-module in one single device

IC-FR5100 has an internal space for installing an optional RF unit, UR-FR5100 / 6100. Two RF units can be installed in a chassis reducing installation space and channel capacity increases. The two RF units can be programmed to operate independently.
Alternatively, the optional second RF module space can be used for the assembly of the duplex filters and power supply. There is also an optional kit (duplex mounting kit) for easy installation of the duplexer inside.

Performance

The IC-FR5100 series has a compact low-profile (2U) and fits directly into a 19 ”rack. The repeater has 5 programmable buttons, 12-character dot-matrix display and 32 memory channels that allow you to use the repeater base station.

25 Watts continuous operation

High stability and high-quality power amplifier enables the repeater to work at full power with no problems.

Multiprotocol

FR5100-serie can operate in dPMR, NXDN and analog mode.

KEY FEATURES

- Repeater fit in 19” rack
- Ready for IDAS
- Up to RF-module in the same device
- 12 characters dot-matrix LCD
- 32 memory channels
- 25 Watt continuous operation

UR-FR5100 (VHF)
UR-FR6100 (UHF)

IC-FR5100 (VHF)
IC-FR6100 (UHF)

FR5100D220VG

The IF-FR5100D220VG/FR6100D220VG is a FR5100/FR6100 repeater with inside the same box, a procom duplexer and a 220V power supply. The repeater has a compact design and fits directly into a standard 19 inch rack.

IDAS

The repeater has built IDAS functionality which provides the ability to migrate to digital communications.

Duplexer inside

The IC-FR5100 series has a procom duplexer instaled inside the box. It's not necessary anymore to open the repeater to tune the duplexer. Each cavity can be tuned directly from the front pannel with a screwdriver 3.5 mm X 75 mm,

Led indications

3 leds on the front panel indicate the level of the battery and the state of the connection.

Multiprotocol

FR5100D220VG-serie can operate in dPMR, NXDN and analog mode.

KEY FEATURES

- Repeater fit in 19" rack
- Ready for IDAS
- Duplexer inside
- 220 V power supply
- 32 memory channels
- 25 Watt continuous operation

Connect and charge an optional battery

An optional battery can be connected on the rear panel. When the repeater is powered by mains supply (110V/220V), a logic board inside the repeater will control the level of charge of the battery and charge it if necessary. In case of power cut the battery will power the repeater.

Control remotely the state of the repeater

An optional radio module can send over the air the level of battery, the temperature onside the repeater and the alarms.

I/O Connector

I/O connectors situated on the rear panel can be used to send alarm in case of problem on the repeater.

Duplexer

IF-FR5100D220VG (VHF)
IF-FR6100D220VG (UHF)

ACCESSORIES

DUPLEXER

Duplexer procom 152-175 MHz

DU-155PN

Duplexer procom 406-470 MHz

DU-455PN

Duplexer mouting kit

IF-KITDUPLEX

CABLE

Article	Description
890Z000009	Coaxial cable RG213 (1m)
OPC-COAXLMR50MROLL	Coaxial cable LMR400 (50 meter)
636Z000059	Connector N for LMR400
AH-ASX5016CO	LIghtning
655Z000047	Connector N for RG213

FOR BASE STATION

	AH-CXL2-1LW	AH-CXL2-2C	AH-CXL2-3LW	AH-CXL2-5HD	AH-CXL70-1LW	AH-CXL70-3C	AH-CXL70-5C	AH-GP10 5/8
Frequencies	l : 144-165 MHz h : 155-175 MHz	144-175 MHz	l : 146-154 MHz lm : 153-162 MHz hm: 158-167 MHz h : 166-175 MHz	144-175 MHz	l : 380-430 MHz h : 420-470 MHz	s : 380-410 MHz f : 406-430 MHz l : 420-450 MHz h : 440-470 MHz	f : 406-430 MHz l : 420-450 MHz h : 440-470 MHz	145-175 MHz
Type	1/2 λ coaxial dipole	Coaxial, Broadband dipole	Coaxial, Broadband dipole	Coaxial, Broadband dipole	1/2 λ coaxial dipole	Coaxial, Broadband dipole	Coaxial, Broadband dipole	5/8 λ coaxial dipole
Bandwidth	20 MHz	31 MHz	9 MHz	7 MHz	50 MHz	30 MHz	30 MHz	6 MHz
Impedance	50 Ohms	50 Ohms	50 Ohms	50 Ohms	50 Ohms	50 Ohms	50 Ohms	50 Ohms
Radiation	Omnidirectional	Omnidirectional	Omnidirectional	Omnidirectional	Omnidirectional	Omnidirectional	Omnidirectional	Omnidirectional
Polarization	Vertical	Vertical	Vertical	Vertical	Vertical	Vertical	Vertical	Vertical
Gain power	0 dBd	0 dBd	3 dBd	5 dBd	0 dBd	3 dBd	5 dBd	3 dBd
Max power	150 W	150 W	150 W	500 W	150 W	150 W	150 W	500 W
Mounting	On 16 - 54 mm dia. mast tube	On 27 - 65 mm dia. mast tube	On 16 - 54 mm dia. mast tube	On 58 - 105 mm dia. mast tube	On 16 - 54 mm dia. mast tube	On 27 - 65 mm dia. mast tube	On 27 - 65 mm dia. mast tube	On 27 mm dia. mast tube
Connector	N-female	N-female	N-female	N-female	N-female	N-female	N-female	SO239
Height	1.26 m	1.75 m	2.80 m	6.6 m	680 mm	1.45 m	2.20 m	1.34 m
Weight	770 g	3 Kg	1.4 Kg	10 Kg	650 g	2.4 Kg	2.8 Kg	1.3 Kg

BACKPACK

The F5122D and the F6122D can be installed in a backpack with an internal battery to have enough power to transmit for operations far away form the head quarter.

Use it anywhere

In this configuration the mobile is powered by an internal battery 12 V, 12 Ah. The battery can be charged either from a vehicle or directly from a source 110/220 V AC. An antenna is connected to the external connector.

BACKPACK

External antenna

A connector on the top of the backpack allow to connect an extarnal antenna and get the full benefit of the mobile.

External Mic

A connector on the side of the backpack can be used to connect a microphone and operate the radio with the bag on the back.

External Speaker

A speaker on the side of the bag offer a clear and loud sound even when the bag is closed.

Other

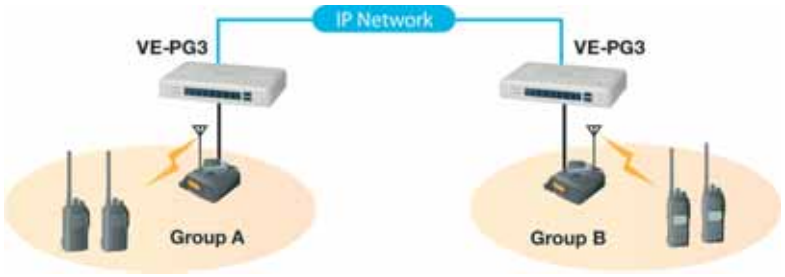
- Very light backpack (9 kg)
- Versatile solution

VE-PG3

VE-PG3 is designed to improve the function of a radio network and facilitate the use of radios by leveraging IP network technology. VE-PG3 has two modes : converter and bridge mode. Converter converts the radio sound to an IP voice (VoIP) and allows the interconnection between connected equipment. Bridged Mode connects two or more radio sites over an IP network and received radio audio bridged to the opposite radio sites in the network. Bridged Mode can connect the radio via the network, regardless of the frequency or type of radio.

Bridge

In bridge mode bridged radio sites from each other in an IP network. The figure below is an example of a bridge configuration where users of the site A can talk to users on the site B.

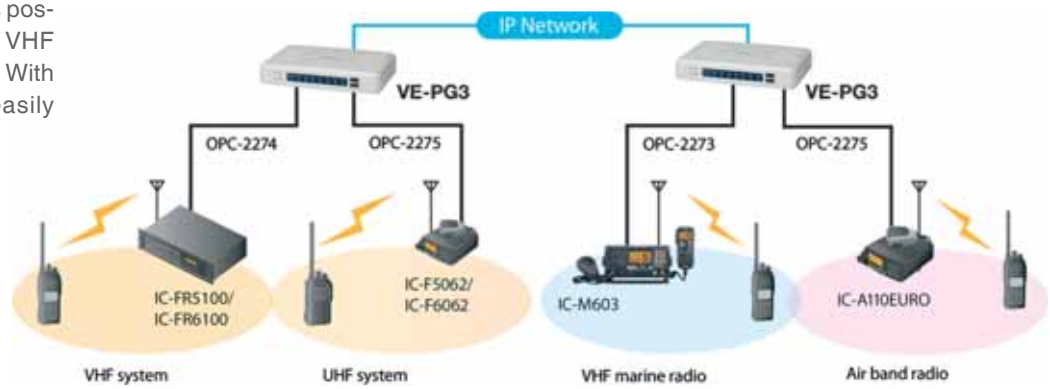


”Site to multisite” communication

When the IP network is compatible with IP multicast routing can be three or more VE-PG3 connected in bridge mode, and provide ”site to multi-site” communications. As seen in the figure below, users of the site A talk with the users of the site B and C simultaneously.

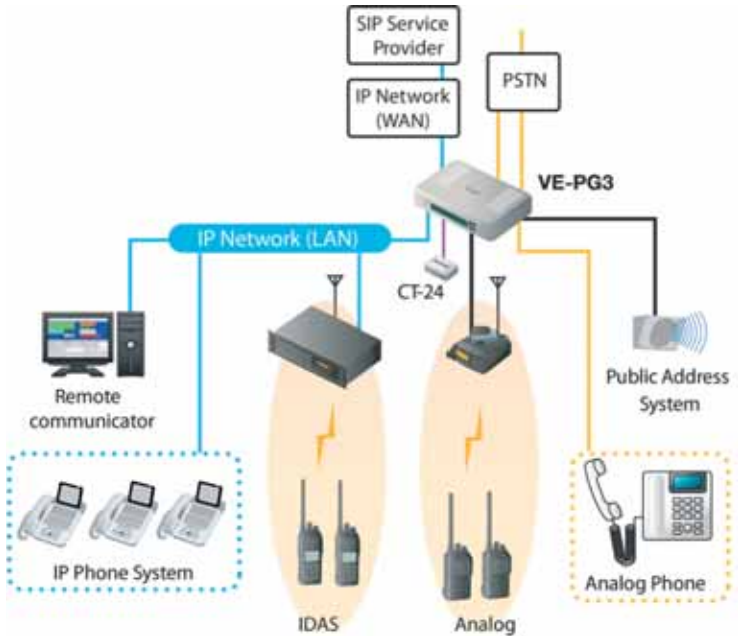
Crossband

cross category, the connection is possible between the VHF / UHF, VHF marine and aviation frequencies. With a connection cable you can easily connect a receiver or repeater.



Telephone

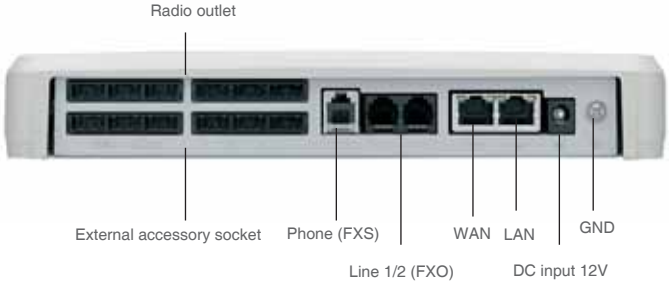
VE-PG3 has RoIP (Radio over IP), SIP gateway, IP router and IP PBX features integrated as standard. VE-PG3 integrates digital and analog radio sites with SIP and analog telephone systems and connecting them between connected users. The digital CT-24 converts analog audio and G.711µ IP telephony codec to Ambe + 2 ™ codec for IDAS radio system. CT-24 is necessary for connecting IDAS-sites with other users.



VE-PG3

External connection

VE-PG3 has two external connectors for audio in / out and other uses. External devices such as sirens, warning lights etc. can be connected to the VE-PG3.



ACCESSORIES

AC-adapter

BC-207S

cable for the IC-FR5000/FR6000 series repeater.

OPC-2274

Digital voice converter

CT-24

IP2AIR

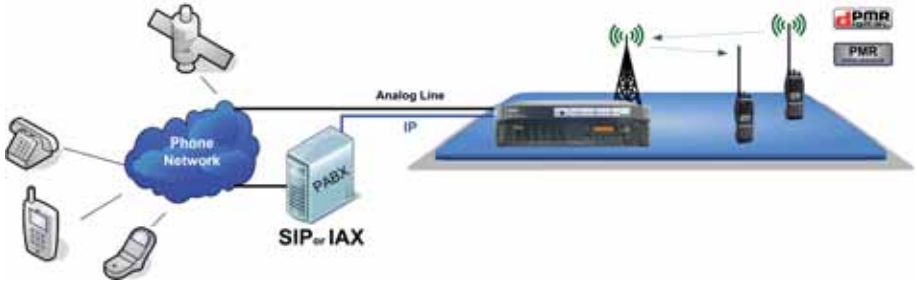
IP2AIR is an advanced solution for professional two-way radios developed by ICOM FRANCE. IP2AIR solutions transforms a simple radio network in an advanced network with a full set of functionalities designed by and for professional. IP2AIR solutions is highly scalable to offer the user only what is needed and not be embarrassed by unwanted functionalities. IP2AIR solutions is designed for ICOM equipment but it can be connected to almost all radio devices available on the market. You can connect two radios on one single IP2AIR.

Full Bridge

The bridge module offers unified communications for interoperability between all kinds of radio network. You can bridge dPMR radios with other digital protcol (DMR, NXDN) and others bands (VHF, UHF, HF.).

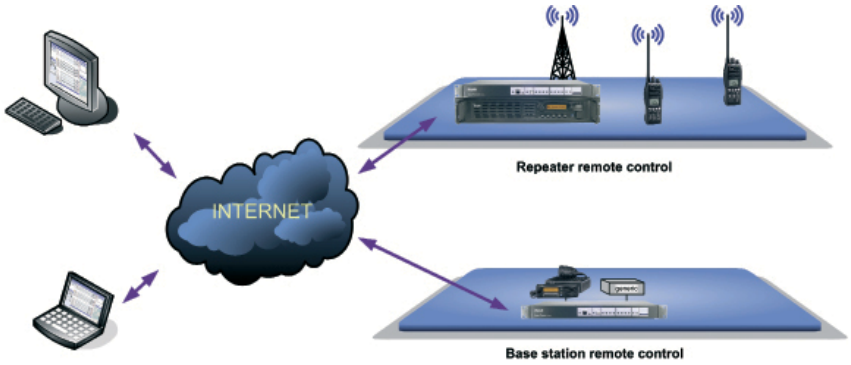
Telephone

The IP2AIR phone patch module links landline and mobile phones with two-way radios. Staff that do not carry a two-way radio can still contact the radio users. The IP2AIR has a SIP client built in and is able to connect to multiple IPBX lines. A pots line connector is also directly available on the IP2AIR to offer connection for simple analogue phone line.



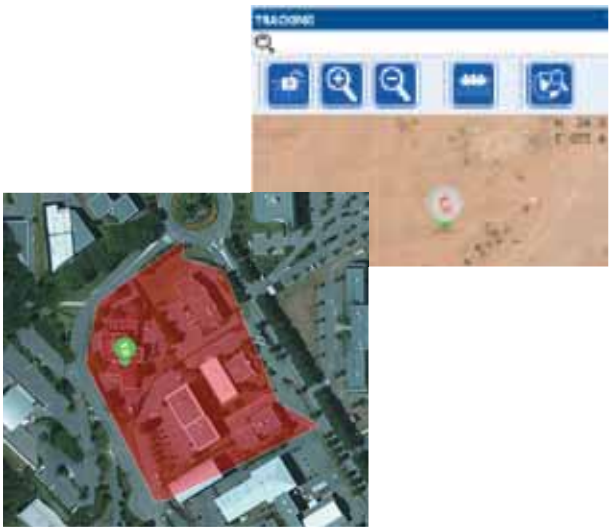
Radioroom

The radioroom software (PC2AIR) monitors all the radio traffic over IP and offers various professional functionalities to simplify the task of the dispatcher. PC2AIR supports digital as well as analogue channels. A friendly interface allows you to know exactly which mode is being used on each channel.



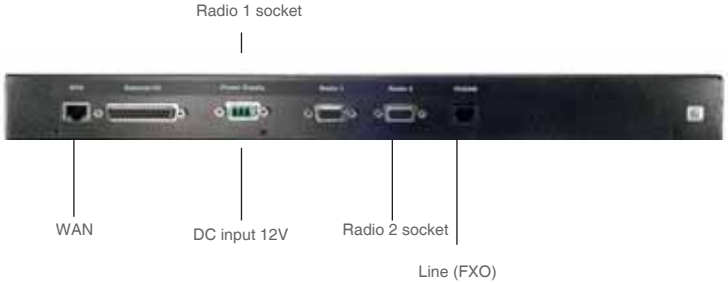
Tracking

The tracking module monitors, tracks and logs the location and movement of subscribers.
The dispatcher can monitor and be informed on the position of a single contact or group. The dispatcher can define zones on a map. The dispatcher can be informed if a user enters or leaves a zone and depending on the configuration an alarm can be launched.



External connection

IP-2AIR has a FXO socket to connect a phone line and a lan connector to be connected to the IP.



ACCESSORIES

Cable for IC-F5062 serie

OPC-IPAIR5062

Cable for IC-FR5000 serie

OPC-IPAIR5100

Digital board for IC-FR5100 serie

UC-IP2AIR

SPECIFICATIONS

	IC-F3400DT IC-F4400DT	IC-F1000D IC-F2000D	IC-F3202DEX IC-F4202DEX	IC-F29DR	IC-F5400D IC-F6400D	IC-F5122D IC-F6122D	IC-FR5100 IC-FR6100
Frequencies	136-174 MHz 380-470 MHz	136-174 MHz 400-470 MHz	136-174 MHz 400-470 MHz	446 MHz	136-174 MHz 380-470 MHz	136-174 MHz 400-470 MHz	136-174 MHz 400-470 MHz
Nb of channels	1024 channels F3400DT/DS 32 channel F3400D	16 channels	16 channels	16 channels (dPMR) 8 channels (analog)	1024 channels	128 channels	32 channels
Current drain (max volume)	1,5 A	1,3 A	550 mA	400 mA	5 A	1,2 A	15 A
Stand-by	140 mA	110 mA	110 mA	110 mA	270 mA	400 mA	400 mA
Operating temperature	-30 C° to +60 C°	-25 C° to +55 C°	-20 C° to +55 C°	-25 C° to +55 C°	-30 C° to +60 C°	-25 C° to +55 C°	-25 C° to + 55 C°
Output power	5 W	5 W	1 W	0,5 W	25 W	25 W	25 W
Audio output (Intern/Extern)	800 mW / 900 mW	800 mW / 400 mW	400 mW / 400 mW	800 mW / 400 mW	4 W / 4 W	4 W / 4 W	3,5 W
Classification	IP68, MIL-STD 810 C,D,E,F,G	IP67, MIL-STD 810 C,D,E,F,G	IP67, Mining : I M2 Ex ib I Mb Gas : II 2G Ex ib IIC T4 Gb Dust : II 2D Ex ib IIIC IP6x T110°C Db	IP67, MIL-STD 810 C,D,E,F,G	IP55, MIL-STD 810 C,D,E,F,G	MIL-STD 810 C,D,E,F,G	MIL-STD 810 C,D,E,F,G
Dimension	123 x 53 x 29 mm	111 x 52 x 30 mm	144 x 63 x 50 mm	111 x 52 x 30 mm	174 x 55 x 176 mm	150 x 40 x 117 mm	483 x 88 x 260 mm
Weight	170 g (without battery)	260 g	258 g	270 g	1500 g	1100 g	5600 g

ANTENNAS

FOR MOBILE

	AH-MH1ZP4R	AH-MH3ZP4R	AH-MHU1ZP4	AH-MHU4ZP4
Frequencies	144-175 MHz	144-175 MHz	l : 406-440 MHz h : 430-470 MHz	f : 406-430 MHz l : 420-450 MHz h : 440-470 MHz
Type	1/4 λ coaxial dipole	5/8 λ coaxial dipole	1/4 λ coaxial dipole	Coaxial, Broadband dipole
Bandwidth	15 MHz	6 MHz	45 MHz	15 MHz
Impedance	50 Ohms	50 Ohms	50 Ohms	50 Ohms
Radiation	Omnidirectional	Omnidirectional	Omnidirectional	Omnidirectional
Polarization	Vertical	Vertical	Vertical	Vertical
Gain power	0 dBd	3 dBd	0 dBd	4 dBd
Max power	150 W	150 W	150 W	100 W
Mounting	21 mm dia. hole	21 mm dia. hole	21 mm dia. hole	21 mm dia. hole
Connector	FME + 4 m cable	FME + 4 m cable	FME + 4 m cable	FME + 4 m cable
Height	0.53 m	1.38 m	0.185 m	0,70 m
Weight	300 g	510 g	280 g	370 g

FOR BASE STATION AND REPEATER

	AH-CXL2-1LW	AH-CXL2-2C	AH-CXL2-3LW	AH-CXL2-5HD	AH-CXL70-1LW	AH-CXL70-3C	AH-CXL70-5C	AH-GP10 5/8
Frequencies	l : 144-165 MHz h : 155-175 MHz	144-175 MHz	144-175 MHz	f : 406-430 MHz l : 420-450 MHz h : 440-470 MHz	l : 380-430 MHz h : 420-470 MHz	s : 380-410 MHz f : 406-430 MHz l : 420-450 MHz h : 440-470 MHz	f : 406-430 MHz l : 420-450 MHz h : 440-470 MHz	145-175 MHz
Type	1/2 λ coaxial dipole	Coaxial, Broadband dipole	Coaxial, Broadband dipole	Coaxial, Broadband dipole	1/2 λ coaxial dipole	Coaxial, Broadband dipole	Coaxial, Broadband dipole	5/8 λ coaxial dipole
Bandwidth	20 MHz	31 MHz	9 MHz	7 MHz	50 MHz	30 MHz	30 MHz	6 MHz
Impedance	50 Ohms	50 Ohms	50 Ohms	50 Ohms	50 Ohms	50 Ohms	50 Ohms	50 Ohms
Radiation	Omnidirectional	Omnidirectional	Omnidirectional	Omnidirectional	Omnidirectional	Omnidirectional	Omnidirectional	Omnidirectional
Polarization	Vertical	Vertical	Vertical	Vertical	Vertical	Vertical	Vertical	Vertical
Gain power	0 dBd	0 dBd	3 dBd	5 dBd	0 dBd	3 dBd	5 dBd	3 dBd
Max power	150 W	150 W	150 W	500 W	150 W	150 W	150 W	500 W
Mounting	On 16 - 54 mm dia. mast tube	On 27 - 65 mm dia. mast tube	On 16 - 54 mm dia. mast tube	On 58 - 105 mm dia. mast tube	On 16 - 54 mm dia. mast tube	On 27 - 65 mm dia. mast tube	On 27 - 65 mm dia. mast tube	On 27 mm dia. mast tube
Connector	N-female	N-female	N-female	N-female	N-female	N-female	N-female	SO239
Height	1.26 m	1.75 m	2.80 m	6.6 m	680 mm	1.45 m	2.20 m	1.34 m
Weight	770 g	3 Kg	1.4 Kg	10 Kg	650 g	2.4 Kg	2.8 Kg	1.3 Kg

A WORLD BRAND NAME

ICOM, THE WIRELESS COMMUNICATIONS EXPERTS

Icom Inc. is a wireless communications manufacturing company located in Osaka, Japan. Since Icom's establishment in 1954, we've had a long record as a trusted manufacturer of land mobile radio, amateur radio, marine radio, navigation products, aviation radio and communications receivers.

Quality & Reliability

Over 50 years of engineering and production excellence is a part of every Icom's product. Using the latest equipment, Icom radios are tested to pass rigorous in-house tests as well as environmental tests to the US Military standard 810 specifications. Icom's products are also compliant with the European RoHS directive.

Production

Icom has not shifted production to lower cost countries, but kept its production base in Japan.
The Wakayama Icom plant has an advanced production system to produce small volume/multi-model wireless communication products.

Icom brand

Icom is recognized as a reliable 2-way radio global brand name around the world. Our land mobile radios are used by many professional organizations all over the world, like public safety, security and humanitarian organizations.

Network

Icom products are sold all around the world. Icom has an international sales and service network, including sales subsidiaries in the U.S., Australia, Germany, Spain and China. Icom is here to support and service our products and your communication needs.

ICOM FIELD SUPPORT TEAM

A TEAM OF EXPERT

Our research and development platform, engineers, technical advisors and after sales technicians collaborate with our customers designing and integrating a wide range of solutions closely matching humanitarian operations requirements.

Support desk & Maintenance

Our Support desk is based in Toulouse. Equipped with the latest models of test equipment, it takes in charge the maintenance and repair of all radios equipment in the full respect of international standard (ISO9001). An important stock of spare parts allows to repair all types of radios in a very short time. A user friendly website allows users to have updated information on their repair.

Hot line

On daily basis, our HOTLINE provides assistance remotely for the design and configuration of new radio network and answers to administrative questions. The support goes from simple advice in radio programming up to the design of global radio network.

Onsite training & support

We provide on-site support and training all around the globe in French and English. We have several programs, Basic, Advanced or Expert that can be adapted on demand to the attendees experience level.

Tests in Lab

We have a fully equipped laboratory, with outdoor antenna mast and several racks of repeaters, to test and approve all our configurations before deployment on the field. When a customer needs assistance the team can quickly setup the same configuration in the lab and offer a very efficient support.

COUNT ON US!

All stated specifications are subject to change without notice or obligation. 06/2016 V1

RADIOCOMMUNICATION

Icom France s.a.s.

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