Full-Duplex Communication That Works Over a Wireless LAN and IP Networks*

- Easy system to set up and use
- Up to 100 users can communicate at the same time
- Encryption provides extra security
- Range is only restricted by your IP network coverage
- No license fee required, no call charges

* Requires headset for full-duplex operation.
Wireless LAN System Extends Your Communication Coverage.

**Individual, Group or Area Communication**

Staff spread across an extended site, such as a hotel, can communicate seamlessly.

---

**Hands-free, Full-duplex Communication**

With an optional headset, the IP100H user can talk and receive simultaneously like a phone call. Hands-free operation allows your staff to carry out other tasks at the same time.

---

**Intra-building Communication**

By deploying access points along the IP network, the IP advanced radio system can communicate all the way from the basement to the top floor. The IP100H can access the nearest access point and can roam between access points.*  
*Same SSIDs are required for roaming use.

---

**Dispersed Sites Communication**

If connected over an Internet VPN, the IP100H/IP100FS can communicate between dispersed sites such as offices or shops in different cities.

---

**Application examples**

- Hotels
- Warehouse / Manufacturing
- Hospitals
- Security
- Restaurant / Drive Thru
- Supermarkets / Retail Shops

---

**IP Communication Terminal**

**IP100H**

- IPX7 waterproof (1m depth water for 30 minutes) for outdoor work or places prone to get wet.
- Compact 58×95×26.4 mm body and 205g (approximate) lightweight.
- Vibration alert function for incoming calls.

---

**Wireless LAN Access Point**

**AP–90M**

- IEEE 802.11 a/b/g/n/ac compliant
- PoE (Power over Ethernet) capability

---

**Remote Communicator**

**IP100FS**

(Supplied with USB flash drive for use as a USB hardware key)

- The IP100FS can communicate with IP communication terminals from a PC.
- The IP100FS can obtain location information of each IP100H based on using access points.
- Can be installed to a Windows® based tablet PC as well as laptop PC.

---

**Controller**

**IP1000C**

- The IP1000C controls all terminal configurations and voice traffic.
- Capable of controlling up to 100 or 20* terminals (including IP100FS).
  * Depending on version.
**Full-duplex Communication**
With an optional headset, the IP100H can talk and receive at the same time. All users in the system can communicate simultaneously.

**Status and Short Data Messaging**
The IP100H/IP100FS can send status and short data messages* to other users.
* Pre-programmed message only for IP100H.

**High Security**
The wireless LAN security protocols (WPA-PSK (TKIP/AES), WPA2-PSK (TKIP/AES)) encrypt your private conversation.

**Easy System to Set Up and Use**
The IP1000C programs almost all terminal configurations over the air. Individual PC programming via cable connection is not required. (Except initial setup)

---

**RoIP Gateway**

**IP Phone and Transceiver Interconnection**
With the VE-PG3 RoIP gateway, the IP advanced radio system can interconnect with an IP phone, analogue transceiver and IDAS™ NXDN™ digital transceiver.

When used with an IP phone system, the IP100H can be used as a phone handset for making internal or external calls.*

* For interconnection with other equipment, verification tests are required before the installation. The IP100H can call a preprogrammed phone number only. (Cannot push phone number to make a call.)

---

**Interconnection image**
The IP communication terminals, radios and telephones can communicate with each other within the doughnut shaped blue ring.
### IP ADVANCED RADIO SYSTEM

#### SPECIFICATIONS

**IP100H**
- **Wireless standards:** IEEE 802.11 a/b/g/n
- **Dimensions (WxHxD)**: 58.8x95x26 mm, 2.3x3.7x1 inch (with BP-271)
- **Weight (approx.):** 205g, 7.2 oz (with BP-271 and antenna)
- **Operating time:** More than 20 hours (with BP-271)
- **RF output power:** Less than 10mW/MHz
- **Voice Codec:** G.711 u-law (64kbps)
- **AF output power (10% distortion):** Internal SP 400mW (typ., 16Ω), External SP 200mW (200Ω, 8Ω)
- **Security:** WEP (64/128-bit), WPA-PSK (TKIP/AES), WPA2-PSK (TKIP/AES)
- **Operating temperature:** -10°C to +60°C, +14°F to +140°F

**Supplied accessories**
- • BP-271 Li-ion battery pack
- • Hand strap
- • MB-127 belt clip
- • Antenna
- • Antenna cap

**IP1000FS (System requirements)**
- **Operating system:** Windows® 8/Windows® 8.1 [32-bit/64-bit]
- **CPU:** Intel® Core™ 2 Duo Processor E6600* 2.4GHz or better
- **Memory:** 2GB or higher
- **Hard disk space:** 1GB of disk space (for saving log files)
- **Audio:** DirectSound compatible audio (Frequency response up to 20kHz, sampling rate 48kHz)
- **Display resolution:** 1920×1080 pixel recommended (Frequency response up to 20kHz, sampling rate 48kHz)
- **LAN:** 10Mbps or faster Ethernet interface, 1000BASE-T/100BASE-TX/10BASE-T
- **Security:** WPA2-PSK (TKIP/AES)
- **RF output power:** 205g, 7.2oz (with BP-271 and antenna)
- **AF output power (10% distortion):** Internal SP 400mW (typ., 16Ω), External SP 200mW (200Ω, 8Ω)
- **Operating temperature:** -10°C to +60°C, +14°F to +140°F

**Supplied accessories**
- • BC-207S AC adapter
- • Cushion sheets
- • Ferrite core
- • Antenna cap
- • Hand strap
- • MB-127 belt clip
- • Antenna
- • Antenna cap

### OPTIONS

#### For IP100H

**Battery packs and case**
- BP-271 Li-ion 7.4V/ 1150mAh (min.), 1200mAh (typ.)
- BP-272 Li-ion 7.4V/ 1850mAh (min.), 2000mAh (typ.)
- BP-273 LRF (AA) batteries ×3

**Rapid charger**
- BC-202
- BC-123S for 120V AC, 88 for 250V AC

**Multi-charger**
- BC-157S
- BC-211
- HM-186LS
- HM-153LS
- HM-166LS

**Speaker-microphones**
- Headsets
  - HS-94 Earhook type
  - HS-95 Behind-the-head type
  - HS-97 Throat type
  - * Either OPC-2006LS or OPC-2328 is required when using any of these headsets.
- Belt clip
- Slim L-type plug adapter cable
- Setup cables
- MB-127
- OPC-2144
- OPC-478UC
- OPC-2144

**Plug adapter cables**
- OPC-2006LS
- OPC-2328
- PTT switch cable

**Headsets**
- HS-94 Earhook type
- HS-95 Behind-the-head type
- HS-97 Throat type

**Supplied accessories**
- BC-207S AC adapter
- Cushion sheets
- Ferrite core

---

Icom, Icom Inc. and the Icom logo are registered trademarks of Icom Incorporated (Japan) in the United States, the United Kingdom, Germany, France, Spain, Russia, Japan and/or other countries. IDAS and IDAS logo are trademarks of Icom Incorporated. NXDN is a trademark of Icom Incorporated and JVC KENWOOD Corporation. Windows and Windows Vista are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. All other trademarks are the properties of their respective holders.

Icom Inc.
1-13-2, Kami-mimami, Hirano-ku, Osaka 574-0003, Japan
Phone: +81 (06) 6793 5302 Fax: +81 (06) 6793 0013 www.icom.co.jp/world

---

### Icom America Inc.
12421 Wilkow Road NE
Bellevue, WA 98004, U.S.A.
Phone: +1 (425) 454-8155 Fax: +1 (425) 454-1509
E-mail: sales@icomamerica.com URL: http://www.icomamerica.com

### Icom Inc.
Glenwood Centre #150-6165 Highway 17
Zac de la Plaine,
80-286 Gdansk, Jaskowa Dolina St. 75, Poland
Phone: +48 (58) 551 4720 Fax: +48 (58) 551 4720
E-mail: icom@icomspain.com URL: http://www.icomspain.com

### Icom (Europe) GmbH
Communication Equipment
Auf der Kreuzwiese 24
66812 Bad Soden am Taunus, Germany
Phone: +49 (6196) 76685-0 Fax: +49 (6196) 76685-50
E-mail: info@icom.europa.de URL: http://www.icom.europa.de

### Icom (UK) Ltd.
Blackside House, Astra Park, Herne Bay, Kent CT6 4ZU, U.K.
Phone: +44 (0) 1227 747141 Fax: +44 (0) 1227 747142
E-mail: info@icom.co.uk URL: http://www.icom.co.uk

### Icom France s.a.s.
Zac de la Plaine,
1 Rue Brindejonc des Moulinais, BP 45804,
31605 Toulouse Cedex 2, France
Phone: +33 (0) 5 61 36 03 00 Fax: +33 (0) 5 61 36 00 00
E-mail: info@icomfrance.com URL: http://www.icom.fr

### Icom New Zealand
146A Harris Road, East Tamaki, Auckland, New Zealand
Phone: +64 (09) 274 4062 Fax: +64 (09) 274 4708
E-mail: inquiries@icom.co.nz URL: http://www.icom.co.nz

### Icom (Australia) Pty. Ltd.
Unit 1, 103 Garden Road
Clayton, VIC 3168 Australia
Phone: +61 (03) 9549 7500 Fax: +61 (03) 9549 7505
E-mail: sales@icom.net.au URL: http://www.icom.net.au

### Shanghai Icom Ltd.
No.101, Building 5, Cailunxinguang Park,
No.188 Marston Road, Chekuan Town,
Songjiang District, Shanghai, 201611, China
Phone: +86 (021) 5755 9987 Fax: +86 (021) 5755 9987
E-mail: bjicom@bjicom.com URL: http://www.bjicom.com

---

Visit www.icom.co.jp/world for local distributors in your country.

© 2014 Icom Inc. Printed in Japan