

iCall 205/206 SIP with RFID

The iCall 205 SIP-RGY with RFID (NWASIN2205) and iCall 206 SIP-RGB with RFID (NWASIN2206) wall mountable room terminals of the iCall nursecall system with an integrated SIP audio client for voice communication between staff and resident/patient. RFID integrated for identification of nursing staff.



Functional Description

A maximum of 50 local bus units can be attached to each iCall 205 SIP-RGY with RFID or iCall 206 SIP-RGB with RFID unit. The local bus units are connected in a topology of choice using a four-wired cable connected to the four-pin plug connector at the back of these SIP units. The data network is connected through the LAN connector.

Features

- Membrane keypad and waterproof speaker for hygiene and easy disinfection
- Magnetic connector with pull-out alarm for Call Cords and pillow speaker
- Easy installation by use of mounting bracket (Included)
- Available with blue (NWASIN2206) or yellow (NWASIN2205) button
- PoE powered with max of 4 LB buttons supported in a topology of choice
- 24V DC powered with max of 50 LB buttons supported in a topology of choice
- On PoE the Local bus is fuse protected and remotely activatable
- SIP client integrated for 2 way speech
- Internet radio
- SD card used for easy maintenance
- Web site programmable
- Local bus support only EU buttons

- Privacy mode for resident/patient
- 24/7 supervised, including reassurance & finding LED and buzzer
- Function button (yellow or blue) can have other function (For example: SPD, service call,...)
- Blue button => default = Code Blue
- Yellow button => default = Emergency
- Green button => Deactivated (LED remains active)
- Green LED indicator => Present indication
- Red button => Call, staff assist
- Wall bracket included
- RFID radio frequency 13,56MHz
- Supported protocols:
 - ISO/IEC 14443A (MIFARE)
 - ISO/IEC 14443B
 - ISO/IEC 18092, JIS: X6319-4 (FeliCa RC-S860)
 - ISO/IEC 21481 (NFCIP-2)
 - ECMA-340 (NFCIP-1)
- Different types of Call Cord:
 - 1 button Call Cord
 - 3 button Call Cord
 - 5 button Call Cord
 - Pillow Speaker

Order information

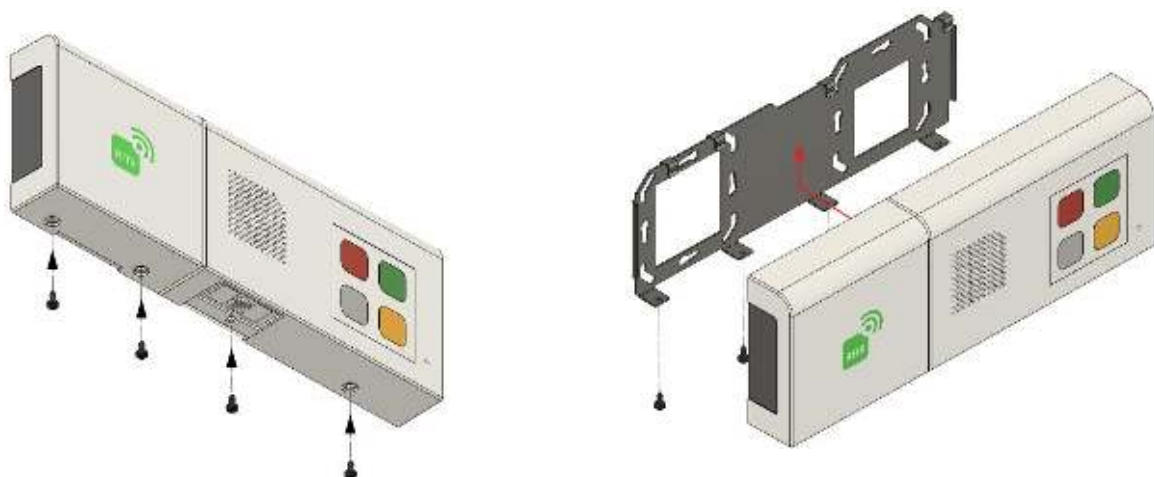
- | | | |
|--------------|-----------------------------|--------------------|
| • NWASIN2205 | iCall 205 SIP-RGY with RFID | |
| • NWASIN2206 | iCall 206 SIP-RGB with RFID | |
| • NWCAIN1301 | iCall CCD01/MAG | 1 button call cord |
| • NWCAIN1303 | iCall CCD03/MAG | 3 button call cord |
| • NWCAIN1305 | iCall CCD05/MAG | 5 button call cord |
| • NWCAIN1327 | iCall CCD27/MAG | Pillow speaker |

Technical information

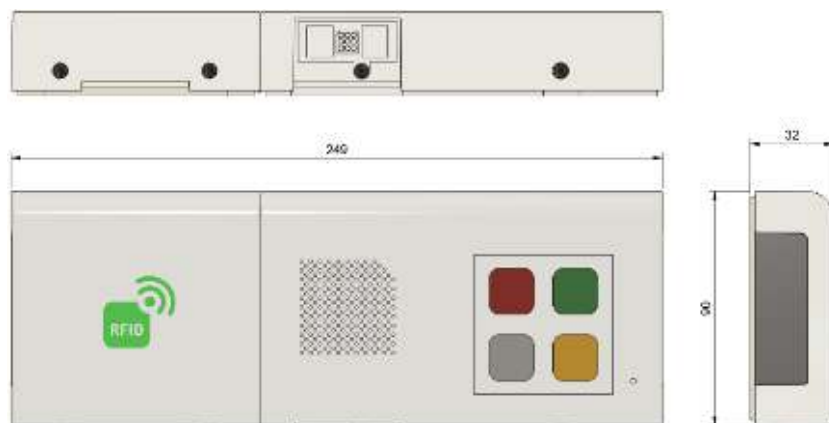
Version		HW: iCall Audio Unit v1.2 iCall RFID v1.0					
iCall 205/206 SIP with RFID							
General Absolute Maximum Ratings !				min	typ	max	unit
	Supply Voltage	V _{cc} (LocalBus)		18	24	30	V
		PoE		37	-	57	V
	Power injection	supply voltage		37	48	57	V
		supply current		87	74	81	mA
	Output Power Local Bus	I _{out} @24V		-	100	-	mA
		P _{out} @24V		-	2,4	-	W
	Operating Temperature (ambient)	T _{amb}		0	-	70	°C
	Maximum reverse voltage	V _r V _{cc} LB		-	40	-	V
		V _r PoE/PWR inj		-	60	-	V
Leackage current (reverse)	I _r V _{cc} LB		-	-	500 *	µA	
Mechanical properties							
Group	Parameter			typ		unit	
Physical	Dimensions	L x W x H		metric		249 x 90 x 32	
		L x W x H		non-metric		9,80" x 3,54" x 1,26"	
	Weight	Total Assembly		metric		433	
				non-metric		15,27	
Material	Housing material	Type of material		ABS V0		-	
		yield stress		29		Mpa	
		yield strain		20		%	
		tensile strength		39,1		MPa	
		softening temperature		94		°C	
		Dielectric strength K20/P50		29		kV/mm	
		Density at 23 °C		1,17		g/cm³	
		Colour		9016		RAL	
		impact strength		22		kJ/m²	
	PCB	Type of material		FR-4, Td>=325°C, T260>=60', T288>=5', CTEz<3.7%, Tg>=135°C		-	
Electrical properties							
Group	Symbol	Parameter	State	min	typ	max	unit
Power	V _{cc} (LocalBus)	Supply voltage	Local Bus PWR	18	24	30	V
	V _{cc} (pwr injection)		PoE	37	48	57	V
	I _{tot} (LocalBus)	Current consumption	Local Bus PWR	94	76	63	mA
	I _{tot} (pwr injection)		PoE	87	74	81	mA
	P _{tot} (LocalBus)	Power consumption	Local Bus PWR	1,69	1,82	1,89	W
	P _{tot} (pwr injection)		PoE	3,22	3,55	4,62	W
	P _{out} (LocalBus)	Output Power Local Bus (PoE PWR)	V _{cc} out LB 24V	0	-	100	mA
		Pout LB 24V	0	-	2,4	W	
PoE	V _{poe-pd}	Voltage range (at PD)		37	48	57	V
	V _{poe-pse}	Voltage range (at PSE)		44	48	57	V
	R _{cable}	Maximum cable resistance		-	20	-	Ω
	I _{max}	Maximum current		-	350	-	mA
	P _{pd}	Power available at PD		-	12,95	-	W
	P _{pse}	Maximum power delivered by PSE		-	15,40	-	W
	Power classification		CLASS 0 (0,44 -> 12,95W)				
	Supported standards		802.3af Standards A (PWR over data) and B (PWR over spare)				
Supported cabling		Cat3/Cat5/Cat5e/Cat6					
audio	P _o	Output Power	THD = 1%, f = 1 kHz	-	2,0	-	W
	A _v	Closed-loop Gain		-	18	-	dB
	THD + N	Total Harmonic Distortion + Noise	PO = 1 W, 8 Ω , f = 1 kHz	-	0,4	-	%
	F _s	Sample Rate (audio)		-	44,1	-	kHz
	F _{sw}	Average Switching Frequency	Class-D stereo amplifier	-	420	-	kHz
General properties							
Group	Parameter		condition	min	typ	max	unit
microprocessor	Core				ARM 926EJ-S		-
	CPU Speed				400		MHz
	L1 I/D Cache				16K I/D		Byte
	On-chip SRAM				128		Kbyte
	ADC				12		bit
	I2C				yes		-
	UART				yes		-
	SSI/I2S				yes		-
SIP	Supported SIP Methods		INVITE ; ACK ; BYE ; CANCEL ; OPTIONS ; REGISTER ; INFO				
	Supported SIP Codecs		G711-A ; G711-µ				
	Supported DTMF				yes		-
	interoperability with softphone				yes		-
	Echo Cancellation				yes		-
	Sample Rate				8		kHz
	SIP Data Format				8		Bit
	SIP Stack				AMSIP		-

supported NFC Protocols		Brand name	possible types				
RFID	ISO/IEC 14443A	MIFARE	• MIFARE Classic 1K • MIFARE Classic 4K • MIFARE Classic EV1 1K • MIFARE Classic EV1 4k • MIFARE DESFire • MIFARE Ultralight C				
	ISO/IEC 14443B	-	TBD				
	ISO/IEC 18092 , JIS: X6319-4	FeliCa (RC-S860)	FeliCa Lite-S ;				
	ISO/IEC 21481	(NFCIP-2)	TBD				
	ECMA-340	(NFCIP-1)	TBD				
Compatible active NFC devices		Supported NFC chipset	possible types				
Smartphone		NXP	e.g. SamSung: • J510FN • SM-G388F • ...				
		S.LSI	e.g. SamSung: • A310F • A510F • A710F • J710FN • G920F/G925F• G930F/G935F • ...				
Thermal properties							
Group	Symbol	Parameter	refers to	min	typ	max	unit
Thermal	T _{amb}	Operating temperature	ambient	0	25	70	°C
	-	flamability rating	plastic	32	77	158	°F
Timing specifications (software v1.0.6)							
Group	Symbol	Parameter	LED-status		typ		unit
	T _{pwr}	first sign of life time	RED LED ON	-	4		s
	T _{sys}	System start up time	4 LEDs ON	-	27		s
	T _{rdy}	start up ready time	status LED(s)	-	9		s
	T _{boot}	Boot time		Total	40		s
Regulations							
Parameter			condition	Compliance			
EMC			Scheduled	N/A			
ESD			Scheduled	N/A			
FCC			pending	No			

Mounting instructions



Dimensions



Contact information

IndigoCare BV
Schoebroekstraat 48
3583 Paal
Belgium
Tel: +32 11 247090

www.indigocare.com
EMEA@indigocare.com