iCall IP-Unit

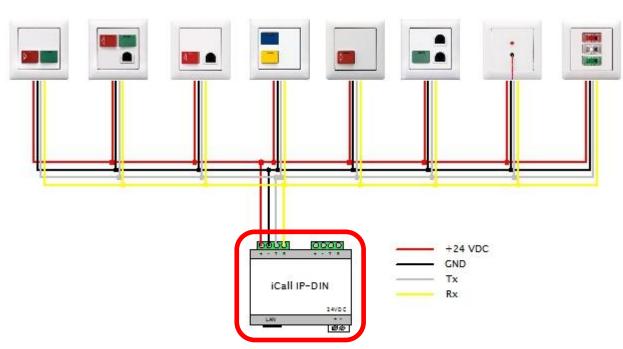
The IP-unit is the master unit for Local Bus, it has 2 local bus connectors on top to connect up to a max of 50 local bus call stations and/or dome lights. An electronic overcurrent protection is implemented. The front has 4 LED indicators displaying the status of the IP-unit. The internal temperature of the IP-unit is constantly monitored and displayed on the website. At the bottom there are 2 connectors, one for the data network (LAN) and the other one to connect the power (+24V DC).

General system description

The local bus is a four wire bus that can be connected to any cable structure. Bus topology, star topology or a combination of both can be used. The maximum total cable length between the IP-units and the furthest LB-units on the bus is 3280 feet (1000m) or the lowest voltage at the LB-units Tx or Rx wire is 18V DC. The four wire bus is composed of one wire conducting 24V DC, one wire serving as GND, one wire serving as Rx and one wire serving as Tx. The IP-unit can support up to 50 LB-units per bus. If there are more than 50 LB-units an additional IP unit is needed and another bus needs to be created.



<u>Topology</u>



Connections

Top:

The top has 2 local bus connectors to connect up to 50 local bus call stations. The stations are connected by a four wire cable.



Front:

The front has 4 led indicators:

- First one indicates if the unit is powered ON. (green)
- Second one for a fuse fail indication. (red)
- Third one is showing the data traffic on the TX line. (green)
- Fourth one is showing the data traffic on the RX line. (green)

Behind the front cover is a switch for resetting the electronically fuse.



Bottom:

At the bottom are 2 connectors, one for the data network (LAN) and the other for connecting the power (+24V DC).



Order information

NWAAES0160

iCall IP-DIN EMEA



Version	HW: iCall_US V1.3 SW: iCall_US V2.05						Pb
iCall_US pro	oduct range						
General Abs	olute Maximum Ratings !			min	typ	max	unit
	Supply Voltage		Vcc	18	24	30	V
	Supply Current forward		lf	60	70	100	mA
	Operating Temperature (ambiant		Tamb	0	-	65	°C
	Maximum reverse voltage		Vr	-	40	-	v
	Leackage current (reverse)		lr	-	-	15	μA
Mechanical pro	perties						
	Parameter			min	typ	max	unit
		Dimensions	L x W x H	-	87 x 78 x 30	-	mm
		(two assembled PCB's)	L x W x H	-	3,425" x 3,071" x 1,181"	-	" (inch
		Base material		-	FR-4, Td>=325°C, T260>=60', T288>=5', CTEz=<3.7%, Tg>=135°C	-	-
		Copper layer thickness		-	1,378	-	mils
	PCB	sepper rayer unionicas		-	0,035	-	mm
		Isolation thickness		-	59,055	-	mils
				-	1,5	-	mm
		Total thickness		-	61,811	-	mils
		Total waisht		-	1,57 0,1279	-	mm
		Total weight (two assembled PCB's)		-	0,1279	-	lbs kg
		Base material	reference doc (mod		PC/ABS	- Self extinguis	
			2 modules: EN 60715		90,6 x 71,5 x 62,2	-	mm
	Plastic Case	Dimensions	acording DIN 43880	L x W x H	3,567" x 2,815" x 2,449"	-	" (inch
		Color		-	Grey RAL 7035	-	RAL
				-	0,2712	-	lbs
	Total Assembly	Weight		-	0,123	-	kg
Electrical prope	rties	•		-			
Symbol	Parameter	Sta	te	min	typ	max	unit
Vcc	Operating Voltage			18	24	30	V dc
lcc	Supply Current	Standby, L		81,0	65,2	57,4	mA
Tee		Standby, LAN active, RESET active		90,4	77,6	71,2	mA
Ptot	Power Consumption	Standby, LAN active		1458	1565	1721	mW
		Standby, LAN active, RESET active		1627	1862	2137	mW
l limit-load	Current limiting circuit breaker	test performed w	ith resistive load	2,1	2,2	2,3	Α
Microcontroller		(h-			<u> </u>		
Parameter		Sta	le	min	typ 10	max	unit Mbit/
	Ethernet Speed				96		MHz
Processor Speed					8	-	Mbyt
						-	
WO	rking memory (SDRAM) Flash memory			-		-	
VVO	Flash memory	Softv	vare	-	8	-	
	÷ , · ·	Softv Hardv		-		-	Mbyt
	Flash memory Interfaces			-	8 net ; FTP server ; Web serve	-	Mbyt
	Flash memory Interfaces			-	8 net ; FTP server ; Web serve	-	Mbyt
	Flash memory Interfaces ties			- Teln	8 net ; FTP server ; Web serve serial (RS232) ; I2C	- r	Mbyt - - unit
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