

По вопросам продаж и поддержки обращайтесь:

Алматы (7273)495-231
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89
Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48

Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курган (3522)50-90-47
Курск (4712)77-13-04
Липецк (4742)52-20-81
Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Новосибирск (383)227-86-73
Ноябрьск (3496)41-32-12

Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Пермь (342)205-81-47
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саранск (8342)22-96-24
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35

Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35
Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Улан-Удэ (3012)59-97-51
Ульяновск (8422)24-23-59
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

Россия +7(495)268-04-70

Казахстан +7(7172)727-132

Киргизия +996(312)96-26-47

сайт: www.honeywell.nt-rt.ru || эл. почта: hwn@nt-rt.ru

КОНТРОЛЛЕРЫ

Технические характеристики на СРО-R



ComfortPoint Open

CPO-Rxx ROOM CONTROLLERS

DATA SHEET



Fig. 1. CPO-Rxx (without optional covers)

GENERAL

The CPO-Rxx family of room controllers provide flexible, configurable, demand-led control that delivers tangible benefits to reduce energy spends and drives new levels of functionality and efficiency in today's buildings. With scalable and freely programmable BACnet MS/TP-based room controllers, smart engineering & commissioning tools, and SYLK technology, multiple and flexible configurations can be achieved to address specific applications.

FEATURES

- Designed to control terminal units such as 2- and 4-pipe fan coil units, chilled ceilings, hydronic, air quality control, and a mix of these applications.
- For complex applications requiring high I/O count.
- Both configurable and freely programmable, covering enhanced applications.
- Support for 1-3 stage fans, variable fan speed drives (VSDs), thermal, floating, and proportional actuators.
- Dual-loop support allows for 2-room application.
- Auto Mac-addressing.
- Fast commissioning using plug-and-play solutions, pre-defined applications and state-of-the-art commissioning via the RoomUp mobile application – eliminating the need for two people when commissioning.
- Reduced number of sensors because sensors are shared across different applications.
- BACnet BTL®-Listed as Advanced Application Controllers (B-AAC) rev 1.12.
- Two housing dimensions and several different I/O versions to match your individual needs.
- 24 VAC and 230 VAC versions.
- Universal mounting options, including terminal covers and color-coded terminals.
- The 230 VAC models feature 24 VAC aux. output voltage, allowing direct connection and powering of field devices.
- Two-wire polarity-insensitive bus interface to connect to Honeywell Sylk wall modules.
- All models with real-time clock. RL4, RL5, RL6, and RL7U with super capacitor for 72-hr data retention.

SYSTEM OVERVIEW

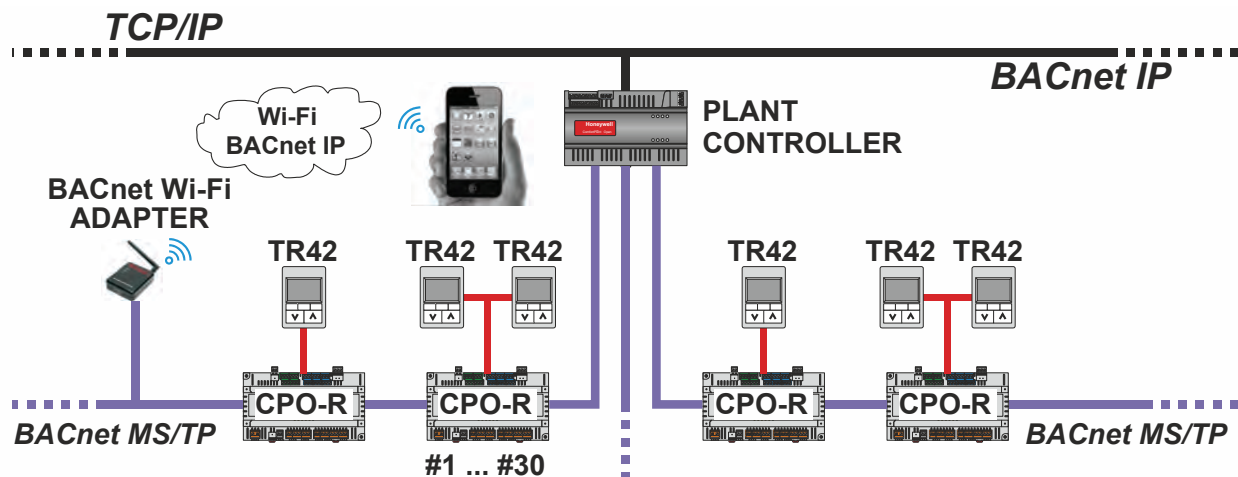


Fig. 2. System overview

Table 1. Overview of models

	OS no.: CPO-...	power supply	AOs	UIs	relays (N.O.)	triacs (24 / 230 VAC)	total no. of I/Os	max. 24 VAC output	remarks
large housing (198 x 110 x 57.5 mm)	RL1	2 VAC	2	6	1	2	11	300 mA	--
	RL2	2 VAC	2	6	4	4	16	300 mA	--
	RL3	VAC	2	6	4	4	16	600 mA	--
	RL4	230 VAC	6	10	4	4	24	300 mA	72-hr data retention
	RL5	VAC	6	10	4	4	24	600 mA	72-hr data retention; with removable terminals
	RL6	24 VAC	6	10	4	4	24	600 mA	72-hr data retention
	RL7U	VAC	6	10	4*	4	23	600 mA	72-hr data retention; with watchdog relay
	RL8	230 VAC	6	10**	4	4	24	300 mA	With lighting support
small housing (162 x 110 x 57.5 mm)	RS1	2 VAC	3	3	0	0	6	300 mA	--
	RS2	230 VAC	1	3	0	2	6	300 mA	Configurable, only
	RS3	230 VAC	0	3	3	2	8	300 mA	Configurable, only
	RS4	2 VAC	4	4	4	2	14	300 mA	--
	RS5	VAC	4	4	4	2	14	600 mA	--
	RS6	24 VAC	1	3	0	2	6	600 mA	Configurable, only

*Including relay 4 (the watchdog), which is not available for use by the application.

**UI1-UI4 are binary-only inputs.

CPU: 32-bit MK24FN Freescale Kinetis Cortex M4

DIMENSIONS AND MOUNTING

Housings

The controller is available in two housing sizes, both conforming to IP20:

- RLxx (large housing):
W x L x H = 110 x 198 x 59 mm and
- RSxx (small housing):
W x L x H = 110 x 162 x 59 mm

See also Fig. 3 and Fig. 4.

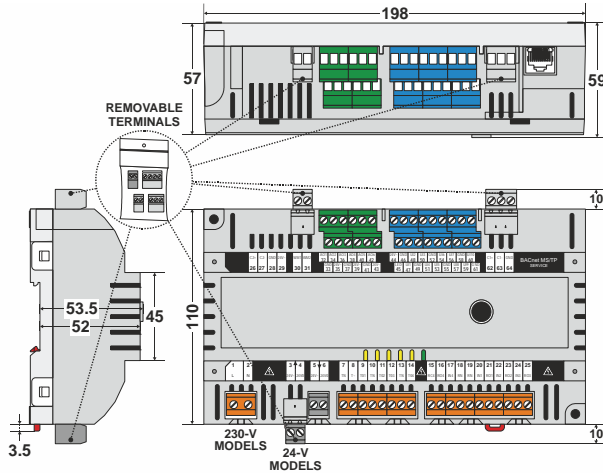


Fig. 3. RLxx dimensions (in mm)

NOTE: In the case of the RL5, all of the terminal blocks are removable.

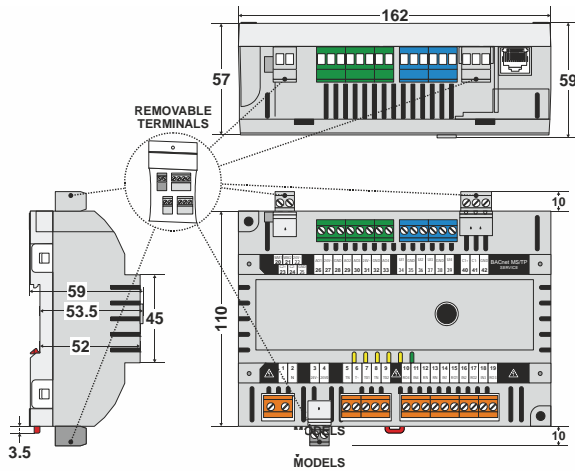


Fig. 4. RSxx dimensions (in mm)

The unit is suitable for mounting on a standard rail, on walls, as well as in wiring cabinets or fuse boxes.

Terminal Protection Covers for IP30

In the case of controllers mounted outside of a cabinet, before applying power to the device, Terminal Protection Covers (10-pc. bulk packs, order no.: IRM-RLC for large housings and IRM-RSC for small housings) must be mounted so as to provide IP30.

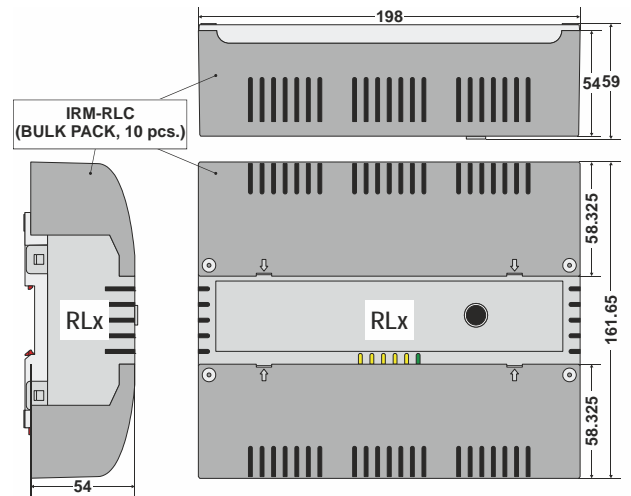


Fig. 5. Large housing, with terminal protection covers, dimensions (in mm)

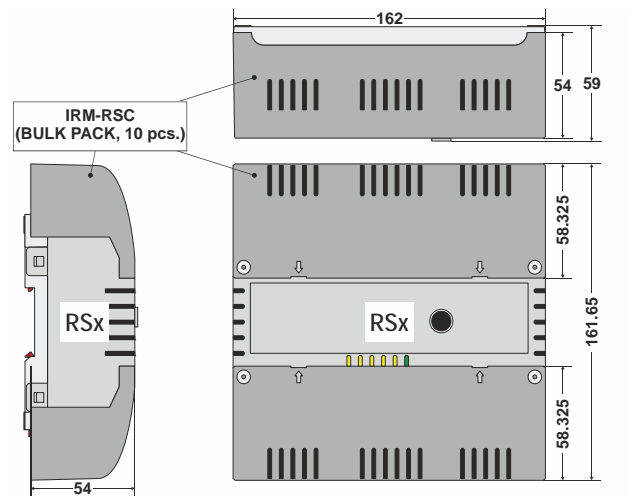


Fig. 6. Small housing, with terminal protection covers, dimensions (in mm)

TERMINAL ASSIGNMENT

General

For a complete list of all terminals and a description of their functions, see Table 2 and Table 6.

Communication Interfaces

All models of the controller features the following communication interfaces:

- A Sylok Bus interface for connection to TR40x/42x Wall Modules;
- A BACnet MS/TP interface;
- An RJ45 connector for connection of the BACnet WiFi

Adapter.

Table 2. RSxx Room Controllers: Overview of terminals and functions (by model)

term.	printing	function	RS1	RS2	RS3	RS4	RS5	RS6
1, 2	"L", "N"	230-V power supply	X	X	X	X	--	--
3, 4	"24V~", "24V0"	Removable 24-V power supply input	--	--	--	--	X	X
3, 4	"24V~", "24V0"	Aux. output voltage (24 VAC) for all triacs	X	X	X	X	--	--
5	"T "	Aux. term. for triac neutral wiring (internally connected with terminal 8)	--	X			X	X
6	"T "	Triac input voltage (24 VAC / 230 VAC) for all triacs; triac-switched	--	X			X	X
7	"T01"	Triac-switched output	--	X			X	X
8	"T "	Aux. term. for triac neutral wiring (internally connected with terminal 5)	--	X			X	X
9	"T02"	Triac-switched output	--	X			X	X
10, 11	"RO4", "IN4"	Output of Relay 4, Input for Relay 4	--	--	--	type 2	type 2	--
12, 13	"RN", "RN"	Aux. terminals for relay neutral wiring	--	--	--	X	X	--
14, 15	"IN1", "RO1"	Input for Relay 1, Output of Relay 1	--	--	type 1	type 1	type 1	--
16, 17	"IN2", "RO2"	Input for Relay 2, Output of Relay 2	--	--	type 1	type 1	type 1	--
18, 19	"IN3", "RO3"	Input for Relay 3, Output of Relay 3	--	--	type 1	type 1	type 1	--
20, 21	"WM1", "WM2"	Removable interface for Sylk Bus	X	X	X	X	X	X
22, 23, 24, 25	"24V~", "C2+", "C2-", "GND"	Aux. power (24 VAC ±20%, 50/60 Hz) + RS485 Modbus interface + corresp. GND	--	--	--	--	--	--
26	"AO1"	Analog Output 1	type 2	type 2	--	type 2	type 2	type 2
27	"24V~"	24 VAC power for field devices	X	X	--	X	X	X
28	"GND"	Ground for AOs	X	X	--	X	X	X
29	"AO2"	Analog Output 2	type 1	--	--	type 1	type 1	--
30	"AO3"	Analog Output 3	type 1	--	--	type 1	type 1	--
31	"24V~"	24 VAC power for field devices	X	--	--	X	X	--
32	"GND"	Ground for AOs	X	--	--	X	--	--
33	"AO4"	Analog Output 4	--	--	--	type 1	type 1	--
34	"UI1"	Universal Input 1	type 1	type 1	type 1	type 1	type 1	type 1
35	"GND"	Ground for UIs	X				X	X
36	"UI2"	Universal Input 2	type 1	type 1	type 1	type 1	type 1	type 1
37	"UI3"	Universal Input 3	type 1	type 1	type 1	type 1	type 1	type 1
38	"GND"	Ground for UIs	X				X	X
39	"UI4"	Universal Input 4	--	--	--	type 1	type 1	--
40, 41, 42	"C1+", "C1-", "GND"	Removable BACnet MS/TP interface and corresponding GND	X				X	X

Relay output types: See Table 3. Universal input types: Table 4. Analog output types: See Table 5.

Table 3. Relay output types and characteristics

	type 1 (standard)	type 2 (high in-rush current)	type 3 (watchdog)
corresponding ROs of RSxx	RO1, RO2, RO3	RO4	--
corresponding ROs of RLxx	RO2, RO3	RO1, RO4	RC4
contact	N.-O.	N.-O.	N.-C.
min. load	5 VAC, 100 mA	24 VAC, 40 mA	5 VAC, 100 mA
switching voltage range	15 ... 253 VAC	15 ... 253 VAC	15 ... 253 VAC
max. continuous load at 250 VAC (cos φ = 1)	4 A	10 A	1 A
max. continuous load at 250 VAC (cos φ = 0.6)	4 A	10 A	1 A
in-rush current (20 ms)	--	80 A	--
usage	n motor	light switching	deflection "Watchdog Functionality (RL7U, only)"

NOTE: The max. sum load of all relay currents at the same time is 14 A.

Table 4. Universal input types and characteristics

	type 1	type 2	type 3
	UI1, UI2, UI3, UI4, UI5, UI6	UI7, UI8, UI9, UI10	UI1, UI2, UI3, UI4 (RL8, only)
dry contact (closed: res. <10 k Ω ; open: res. > 20 k Ω ; max. 0.2 Hz; pull-up voltage: 10 V)	X		--
dry contact (closed: res. <10 k Ω ; open: res. > 20 k Ω ; max. 0.2 Hz; pull-up voltage: 24 V); suitable for light switch applications	--		X
fast binary (=counter) input (max. 30 Hz; pulse ON = min. 16 ms; pulse OFF = min. 16 ms; closed: voltage < 1 V; open: voltage > 5 V; pull-up voltage: 10 V)	X		--
fast binary (=counter) input (max. 30 Hz; pulse ON = min. 16 ms; pulse OFF = min. 16 ms; closed: voltage < 1 V; open: voltage > 5 V; pull-up voltage: 24 V)	--		X
0(2) ... 10 V	X	X	--
NTC20k Ω	X	--	-
SetPoint and FanSpdSW (from T7460x)	X	--	--
NTC10k Ω	X	--	-
PT1000 + Ni1000TK5000	--	X	--

Table 5. Analog output types and characteristics

	type 1	type 2	type 3	type 4	type 5
output voltage	0...11 V				
output current	0...1 mA	0...5 mA	0...10 mA	0...20 mA	-1...+1 mA
min. accuracy	± 150 mV				
max. ripple	± 100 mV				
accuracy at zero point	0...200 mV				± 150 mV

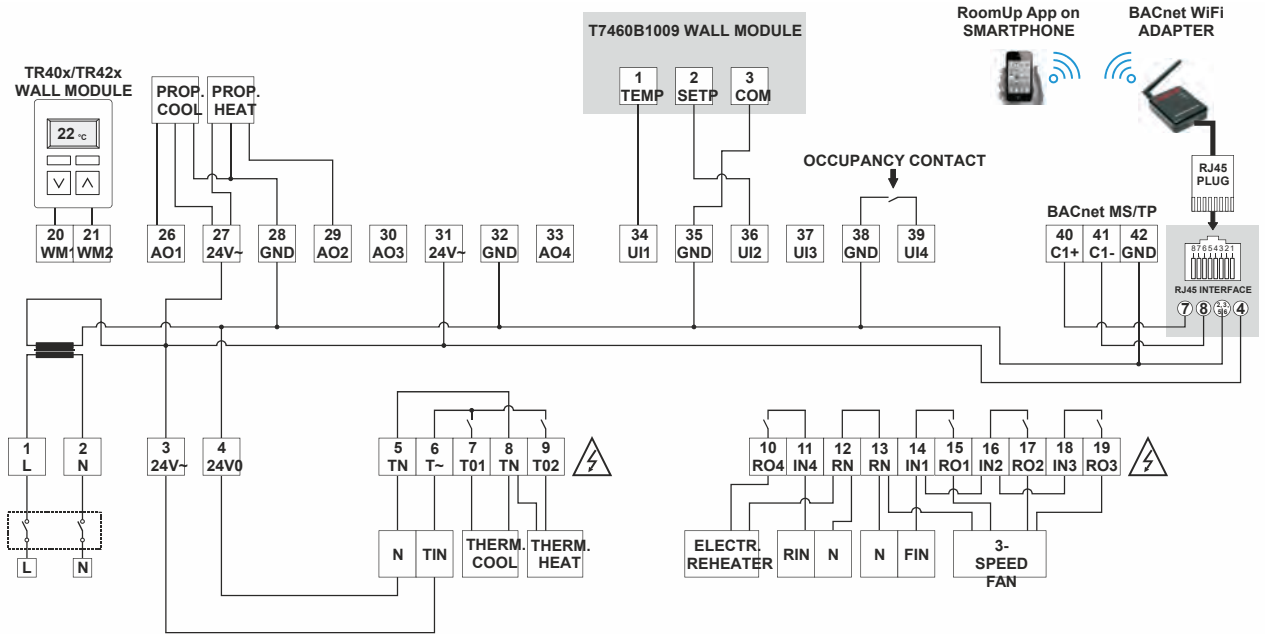


Fig. 7. RS2, RS3, and RS4 (230-V models) and example wiring

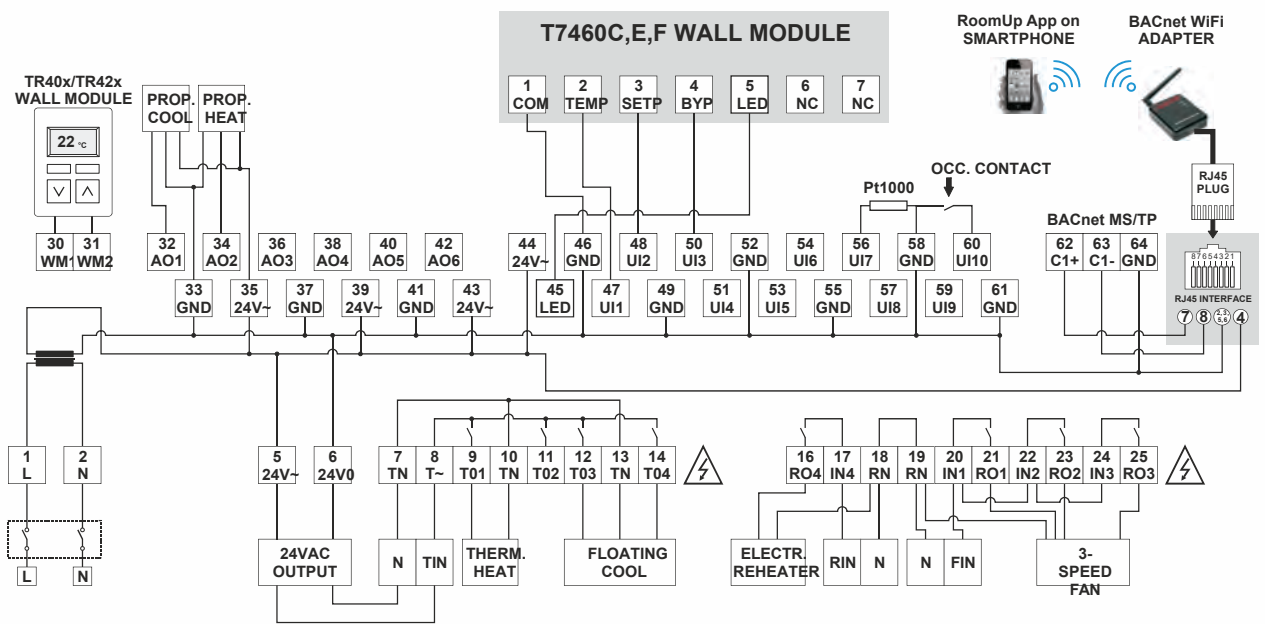


Fig. 8. RL2 and RL4 (230-V models) and example wiring

По вопросам продаж и поддержки обращайтесь:

Алматы (7273)495-231
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89
Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48

Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курган (3522)50-90-47
Курск (4712)77-13-04
Липецк (4742)52-20-81
Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Новосибирск (383)227-86-73
Ноябрьск(3496)41-32-12

Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Пермь (342)205-81-47
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саранск (8342)22-96-24
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35

Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35
Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Улан-Удэ (3012)59-97-51
Ульяновск (8422)24-23-59
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

Россия +7(495)268-04-70

Казахстан +7(7172)727-132

Киргизия +996(312)96-26-47

сайт: www.honeywell.nt-rt.ru || эл. почта: hwn@nt-rt.ru