



# RUA-CP\_1H ESTIA MONOBLOC



The Toshiba air to water heat pump monobloc system is designed to deliver the right temperature for space heating and produce domestic sanitary hot water throughout the year. The ESTIA system has the additional advantage of providing cooling in the warmer seasons.

## High Energy efficiency providing enhanced energy savings

A+ energy class in space heating.  
Part Load efficiency  $\eta_s$  up to 144% certified by Eurovent EuroHP according to NF414 & EN14825.

The Toshiba Inverter uses the new vector controlled Intelligent Power Drive Unit, which enables a wider range of compressor frequencies resulting in better temperature control.

## Easy to install, easy to control

With the ESTIA Monobloc, all hydraulic components are combined inside the outdoor unit offering one very compact solution. Available in 17kW and 21kW models, the ESTIA Monobloc provides space heating and Domestic Sanitary hot water direct production, without DX connections.

It can be installed safely in the most suitable place outside new building as well as renovations.

The ESTIA Monobloc large screen remote controller is designed to be simple, intuitive and easy to use options are compatible with most standard communication protocols (JBUS, MODBUS, BACnet and LONWORKS).

COP MAX



4.10

CAPACITY



17kW &gt; 21kW

OPERATION



-20°C &gt; +46°C

HOT WATER



+40°C &gt; +60°C

### Best in class performances:

- Max COP 4.10 @+7°C & COP 2.51 @-7°C air temperature
- Direct hot water production up to 60°C
- Heating Operation down to -20°C
- Domestic sanitary hot water production
- Master/Slave group control up to 4 units



OUTDOOR UNITS

RUA-CP1701H  
RUA-CP2101H



REMOTE CONTROLS

Delivered with the unit

**ESTIA MONOBLOC 17 - 21KW Performance data**

		RUA-CP1701H8	RUA-CP1701H8
<b>Seasonal space heating energy efficiency Low Temperature</b>			
<b>Energy Efficiency Class - Low Temp</b>		<b>A+</b>	<b>A+</b>
<b>Seasonal space heating energy efficiency (ηs)</b>		144%	140%
SCOP		3.68	3.56
<b>Under floor heating Air +7°C Water 35°C</b>			
<b>Maximum heating capacity</b>	kW	21.8	22.2
<b>Nominal heating capacity</b>	kW	17.1	21.1
<b>COP</b>	W/W	4.1	4.1
<b>Under floor heating Air -7°C Water 35°C</b>			
Maximum heating capacity	kW	10.5	15.3
Nominal heating capacity	kW	7.27	10.4
COP	W/W	2.34	2.51
<b>Radiator heating Air -15° Water 35°C</b>			
Maximum heating capacity	kW	5.18	7.58
Nominal heating capacity	kW	5.15	7.57
COP	W/W	2.05	2.15
<b>Radiator heating Air +7° Water 45°C</b>			
<b>Maximum heating capacity</b>	kW	20.4	21.5
<b>Radiator heating Air -7°C Water 45°C</b>			
Maximum heating capacity	kW	10.1	14.7
<b>Radiator heating Air -15°C Water 45°C</b>			
Maximum heating capacity	kW	4.93	7.01
<b>Seasonal space heating energy efficiency Mid Temperature</b>			
<b>Energy Efficiency Class - Low Temp</b>		<b>A+</b>	<b>A+</b>
<b>Seasonal space heating energy efficiency (ηs)</b>		118%	111%
SCOP		3.03	2.85
<b>Radiator heating Air +7°C Water 55°C</b>			
<b>Maximum heating capacity</b>	kW	18.1	23.2
<b>Radiator heating Air -7°C Water 55°C</b>			
Maximum heating capacity	kW	8.45	11.28
Leaving water temperature Heating	°C	20 ~ 60°C	20 ~ 58°C
<b>Nominal cooling capacity Air +35°C Water 7°C-12°C</b>			
<b>Nominal cooling capacity</b>	kW	14.9	18.6
EER	W/W	3.0	3.1
Leaving water temperature Cooling	°C	5 ~ 18°C	5 ~ 18°C

**ESTIA MONOBLOC 17 - 21KW Physical data**

Monobloc Unit		RUA-CP1701H8	RUA-CP2101H8
Dimensions (HxWxD)	mm	1141x584x1579	1141x584x1579
Weight <sup>(1)</sup>	kg	191	199
Sound power level <sup>(2)</sup>	dB(A)	71	74
Sound pressure Level @10m <sup>(3)</sup>	dB(A)	40	43
Compressor type		DC Twin rotary	DC Twin rotary
Refrigerant		R410A	R410A
Refrigerant charge <sup>(1)</sup>	kg	8	8
Water connections with hydronic module (inlet - outlet)	inch	1 1/4 - 1	1 1/4 - 1
Water connections without hydronic module (inlet - outlet)	inch	1 - 1	1 - 1
Expansion tank volume	l	8	8
Max water side operating pressure without hydronic module	kPa	1000	1000
Max water side operating pressure with hydronic module <sup>(4)</sup>	kPa	300	300
Available Static pressure with fixed speed pump	kPa	60-190	60-190
Available Static pressure with variable speed pump (100%)	kPa	30-105	40-105
Power supply	V-ph-Hz	360/440-3-50	360/440-3-50

**ACCESSORIES**

Description	Model name	Functions
Master / Slave up to 4 units sensor (only one sensor needed for Master)		Allow master/slave operation of two to four units connected in parallel
Domestic hot water sensor		Necessary for DHW production
Additional outdoor ambient temperature sensor		Better reading of outdoor air temperature

\* In accordance with standard EN 14511-3:2013

\*\* In accordance with standard EN 14825:2013, Average climate

(1) Values are guidelines only. Refer to the unit nameplate.

(2) In dB ref=10-12 W, (A) weighting. Declared dualnumber noise emission values in accordance with ISO 4871 (with an associated uncertainty of +/-3dB(A)). Measured in accordance with ISO 9614-1 and certified by Eurovent.

(3) In dB ref 20 μPa, (A) weighting. Declared dualnumber noise emission values in accordance with ISO 4871 (with an associated uncertainty of +/-3dB(A)). For information, calculated from the sound power level Lw(A).

(4) Min. water-side operating pressure with fixed speed hydronic module is 50 kPa and with variable speed hydronic module is 40 kPa.

Part Load performances ns & SCOP are including variable speed pump option