# 500L



## Multi Functional Water Tank User's Manual

R120400630,V1.0

# CONTENT

1.Technical data1
1.1 Technical data1
1.2 Inner Structure2
2.Introduction
2.1Main components3
2.2Outlines and dimensions5
3.Application illustration7
4.Installation13
4.1 Installation of temperature sensor13
4.2 Mechanical temperature controller14
4.3 Overheating protector14
5 Wiring Diagram14



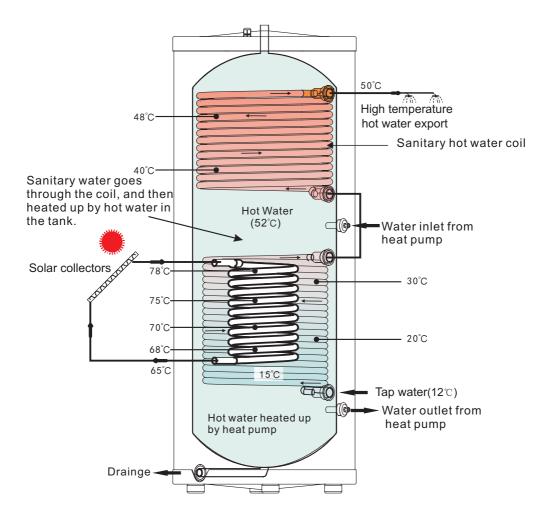
### 1.Technical data

#### 1.1 Technical data

	Model			MWT 500C.1
	Water volume			500
		Height	mm	1850
	Net diension	Dia.	mm	700
	Inside shell ma	terial		304 stainless steel
	Outside shell m	aterial		304s.s/paintion metal
	Insulation material			Polyurethane injection foam
c===================	Insulation thickness			50
	Emtpy weight			120
	Solar coil material			304 stainless steel
	Solar coil tube diameter			22
	Solar coil length			15
	Shower coil material			304 s.s
	Shower coil tube diameter			22
	Shower coil len	gth	m	20
	Electric heater			3



#### 1.2 Inner structure



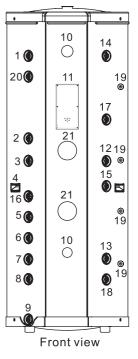


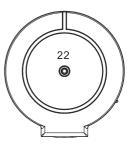
#### 2.Introduction

#### 2.1 Main components

#### MWT 500C.1

Item on	Name	Size
1	Water inlet from other heating source	G2"female
2	Water outlet to radiator	G2"female
3	Solar coil water inlet	G1"female
4	Handle	
5	Water inlet from radiator	G2"female
6	Solar coil water outlet	G1"female
7	Water inlet from floor heating	G2"female
8	Water outlet to other heating source	G2"female
9	Drainage	G3/4'' female
10	Temperature meter	
11	Electric heater	3 KW
12	Shower coil 1 water outlet	G1"female
13	Shower coil 1 water inlet	G1"female
14	Shower coil 2 water outlet	G1"female
15	Water inlet from heat pump	G2"female
16	Water outlet to floor heating	G2"female
17	Shower coil 2 water inlet	G1"female
18	Water outlet to heat pump	G2"female
19	Temperature sensor hole	
20	Magnesium rod installation	G3/4'' female
21	Electric heater	G2"female
22	Expansion tank	G3/4"male

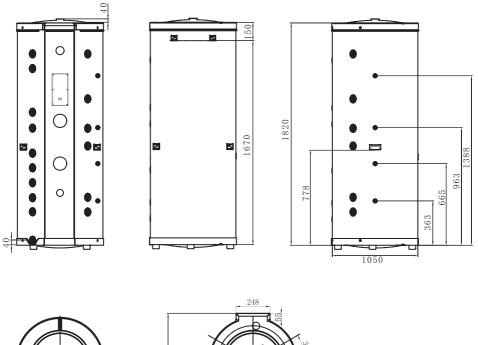




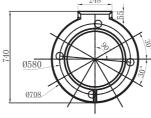
Top view

### 2.Introduction

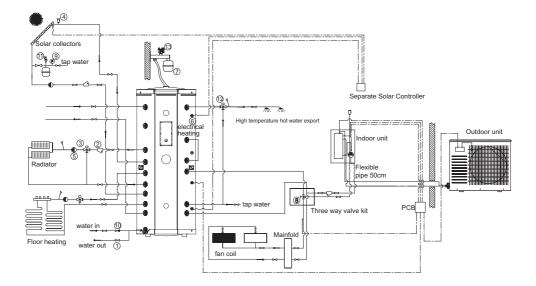
2.2 Outlines and dimensions MWT 500C.1





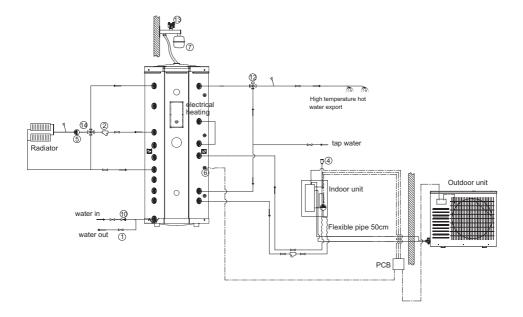


#### 3.1 Total system graph



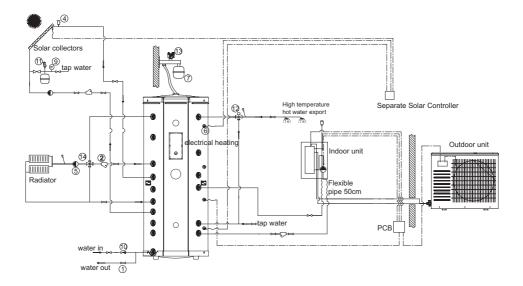
No	Name	legend	No	Name	legend
1	shutoff valve	$\rightarrow$	8	electric the 3-way valve	
2	filter ball	-2-	9	pressure gage	P
3	shunt valve	-₩	10	non-return valve	->+
4	automatic air valve	Ą	11	T/P valve for solar system	ę
5	water pump	۲	12	water mixing valve	₩
6	sensor	~~*	13	safety valve	Ø
7	expansion tank	ę			

#### 3.2. Air Water + Multifunctional Tank



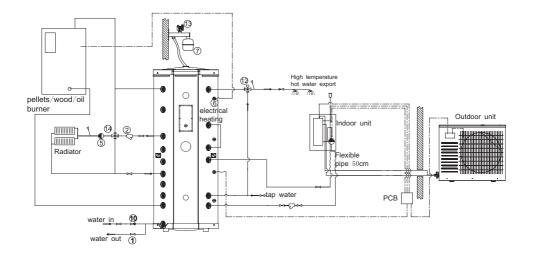
No	Name	legend	No	Name	legend
1	shutoff valve	$\rightarrow$	8	electric the 3-way valve	-120-
2	filter ball	-2-	9	pressure gage	P
3	shunt valve	-1≩1	10	non-return valve	->+
4	automatic air valve	Ų	11	T/P valve for solar system	ê
5	water pump	۲	12	water mixing valve	<b>₩</b>
6	sensor	~~	13	safety valve	Ċ
7	expansion tank	þ	14	water mixing valve	#

#### 3.3 Air Water+Multifunctional Tank+Solar Collectors



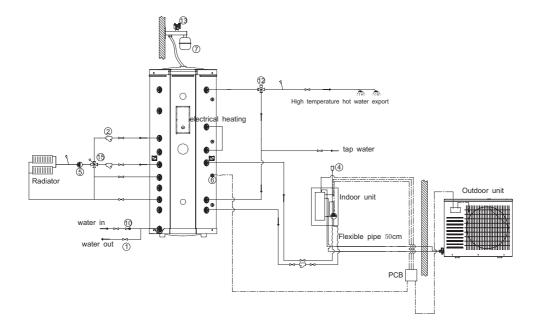
No	Name	legend	No	Name	legend
1	shutoff valve	$\Rightarrow$	8	electric the 3-way valve	-**-
2	filter ball	-\$-	9	pressure gage	P
3	shunt valve	-1743	10	non-return valve	->
4	automatic air valve	Ą	11	T/P valve for solar system	ģ
5	water pump	۲	12	water mixing valve	-₩-
6	sensor	~~	13	safety valve	<b>N</b>
7	expansion tank	<del>P</del>	14	water mixing valve	-\$-

3.4 AW 24.4 To Tank In Combine With "pellets/wood/oil burner".



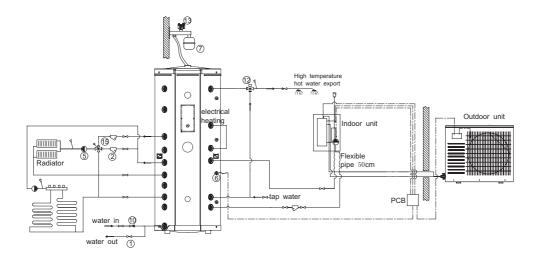
No	Name	legend	No	Name	legend
1	shutoff valve	->>-	8	electric the 3-way valve	-14-1-
2	filter ball	-2-	9	pressure gage	P
3	shunt valve	-1≩1	10	non-return valve	->+
4	automatic air valve	Ų	11	T/P valve for solar system	ģ
5	water pump	۲	12	water mixing valve	<b>₩</b>
6	sensor	~-	13	safety valve	Ċ
7	expansion tank	ę	14	water mixing valve	-#

#### 3.5 With bivalent valve and radiator system only



No	Name	legend	No	Name	legend
1	shutoff valve	$\rightarrow$	8	electric the 3-way valve	-#
2	filter ball	-0-	9	pressure gage	P
3	shunt valve	-1243	10	non-return valve	->★
4	automatic air valve	ą	11	T/P valve for solar system	ģ
5	water pump	۲	12	water mixing valve	-¥-
6	sensor	~~	13	safety valve	
7	expansion tank	ę	14	water mixing valve	*
			15	biavlent valve	-¥

3.6 With bivalent valve, radiator and radiator



No	Name	legend	No	Name	legend
1	shutoff valve	->>-	8	electric the 3-way valve	
2	filter ball	-2-	9	pressure gage	P
3	shunt valve	-1251	10	non-return valve	->+
4	automatic air valve	ą	11	T/P valve for solar system	ê
5	water pump	۲	12	water mixing valve	-₩-
6	sensor	~~•	13	safety valve	tø
7	expansion tank	ę	14	water mixing valve	<u> </u>
			15	biavlent valve	_¥

### 4.Installation

#### 4.1 Installation of temperature sensor

Temperature sensor should be put into the water tank as follows:

1. Remove the plastic cover for installing the temperature sensor on the water tank, screw off the plastic nut and remove the "O" ring.



2. Pass the temperature sensor through the plastic nut and reinstall the  $\ensuremath{^{''}\text{O}''}$  ring.



3. After the temperature sensor passes through the plastic cover and completely goes into the temperature sensor hole on the tank, please screw tightly the plastic nut.



### 4.Installation

#### 4.2 Mechanical temperature controller

The controller is used to turn ON/OFF the electric heater. Water temperature can be set between 30  $^\circ\!C$  and 75  $^\circ\!C$ . Turn the knob clockwise to have a higher set temperature. When the water temperature is lower than the set temperature, the electric heater will be turned on.

When the water temperature gets or higher than the set temperature, the electric heater will be turned off.



30 ℃ is the lowest set Temp.

75℃ is the highest set Temp.

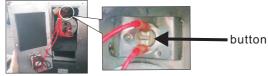
**-75℃** 

Note: There are several reserved places for temperature sensors on the water tank, please choose the suitable ones according to real application.

#### 4.3 Overheating protector

- 1. When the water temperature reaches 90°C, the protector is cut off, and the electric heater stops working.
- 2. After clear the failure and the temperature islower than 90°C, it can be reset manually. please close it by press the button.

The above operation should be done by professionals.



### 5.Wiring Diagram

