

TT18-4G-M

Temperature and humidity transmitter

User Guide V1.1



1. Product overview

It's time to use TT18-4G-M real-time data logger to real-time manage and control your products while in-transit. This easy to use system provides global visibility at an affordable cost. Simply initiate a shipment and place a TT18 real-time data logger. Cloud-based monitoring platform will then start reporting temperature, humidity, light and location. So you always know where are your products and in what condition.

2. Product specifications

Specification	Details
Dimension	90mm*64mm*27mm
Battery	Built-in 3.7V/4400mAh Lithium battery
GSM antenna	Built-in
Transport Mode	CAT-M1\NB-IOT\GSM
Flash memory	32Mbit, Can save 20000 data
Temperature precision	±0.3°C
Humidity precision	±3%
Operating temperature range	-20°C~ +60°C
Operating humidity range	0~90%
Power consumption	Active mode(avg.) < 120mA Sleep mode(avg.) < 20uA
Frequency band	CAT-M1: 700 (Bd12, Bd13, Bd28, Bd85), 800 (Bd18, Bd19, Bd20, Bd26, Bd27), 850 (Bd5), 900 (Bd8), AWS-3 (Bd66), AWS-1 (Bd4), 1800 (Bd3), 1900 (Bd2, Bd25), 2100 (Bd1) MHz NB-IOT: 600 (Bd71), 700 (Bd12, Bd13, Bd28, Bd85), 800 (Bd18, Bd19, Bd20, Bd26), 850 (Bd5), 900 (Bd8), AWS-3 (Bd66), AWS-1 (Bd4), 1800 (Bd3), 1900 (Bd2, Bd25), 2100 (Bd1) MHz GSM :850/900/1800/1900MHz
LED	Device status/charge
Way of use	Multiplicity
Service life	120 days

3. Indicators and interface



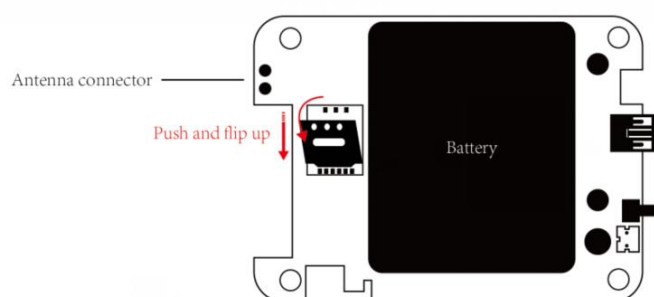
NO.	Items	Description
1	Status LED	Indicate the status of device (two colors led light ,Green+Red)
2	Charge LED	Charge status (single color led light ,Red)
3	Light Sensor	Detect bright and dark changes (Send a piece of data immediately when the state changes)
4	USB Port	Configure/Charge the device/Connect to computer to automatically generate PDF report
5	Button	Power ON/Power OFF/ View the device's status

Note: When the USB port is connected for configuring or charging, no data is generated or sent to the server.

4. Power ON/OFF operation&Indicator light(LED light) status

4.1 Power on/off state & operation

Power ON operation: Remove the TT18-4G-M device four screws, open the device, take out the PCB and insert the SIM card (Please follow the picture below to insert the simcard), then assemble the device.



Press the button for 3 seconds, the device is running after the green light on for 5 seconds, and it will immediately send a data (If the SIM card specifies APN and other parameters, please configure through the configuration software).

Power OFF operation: In the running state, press the button for 3 seconds, and the device will shut down after the red light is on for 5 seconds.

Status	Button action	LED status	Description
Power ON	Keep button pressed for more than 3 sec.	Green light on for 5 sec.	Indicate the device is turned on
Power OFF	Keep button pressed for more than 3 sec.	Red light flashes once	Indicate the device is turned off

4.2 Device current status indicator

Note: After booting, if you'd like to know the device's status, please press the button shortly and then loose it. Then the Status LED will show you the device in what status currently and meanwhile the device will send a data to server. If Status LED doesn't work, it means the device is in shutdown mode. When connect the device with PC, the status LED will flash in red, after finished the PDF report generating, the status LED will light in red. There is a priority order of the device's status. The greater number stands for the higher priority. LED flashes as follows:

indicating the device status(Green+Red LED)		
Device LED status	Explanation	Priority
Green led quick flashing (on for 0.1 seconds and off for 0.1 seconds)	Working properly	1
Red led quick flashing (on for 0.1 seconds and off for 0.1 seconds)	Network anomalies	2
Red led slow flashing (on for 1 seconds and off for 1 seconds)	Battery low voltage	3
Green led slow flashing (on for 1 seconds and off for 1 seconds)	Flight mode	4
Off	Power OFF	5

4.3 Charge indicator

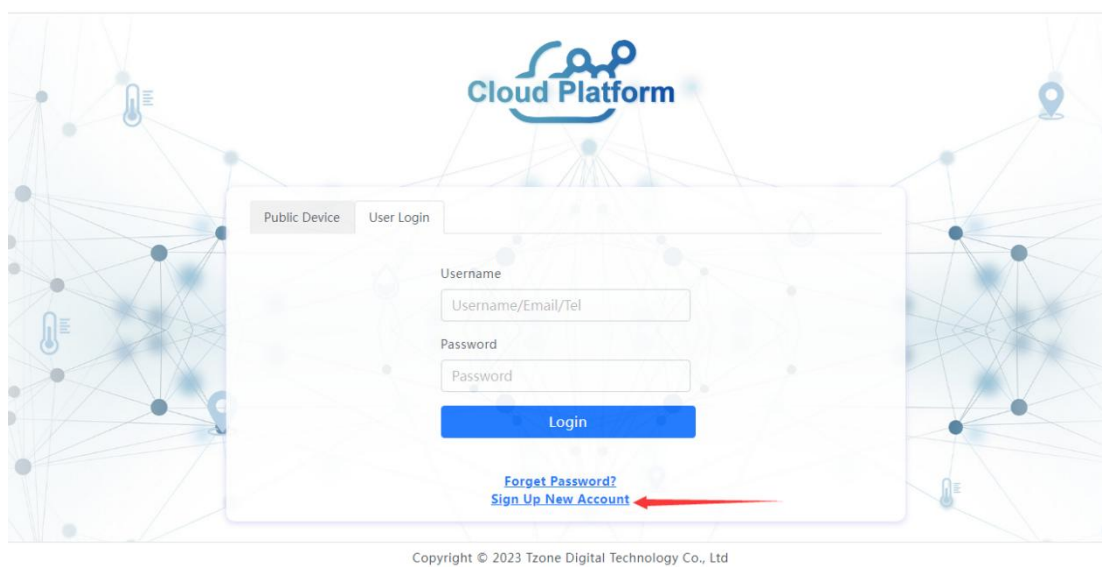
Power status(Red LED)	
Power status	Explanation
Red on	charging
Red off	full charged

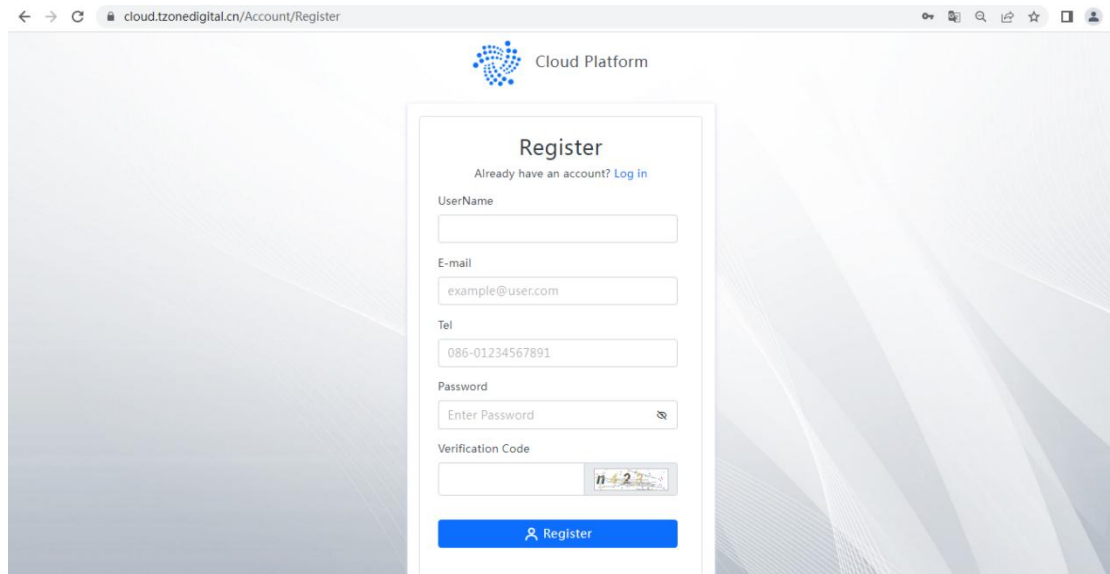
5. Platform data query

TZONE cloud platform Address: <http://cloud.tzonedigital.com/>

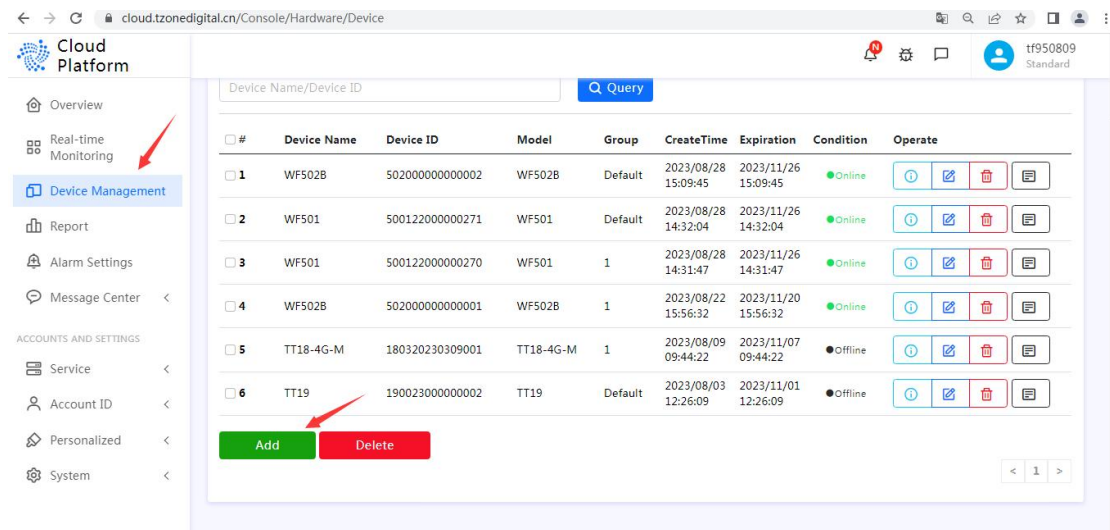
It needs to register an account firstly, then add TT18 IMEI in "Device Management" of "Basic". After adding TT18 IMEI, please click once the TT18-4G-M physical button, the TT18-4G-M will send a data to server right away(if the network is unblocked) , or you can wait for the device to send the latest data to server.

5.1 Register and Login





5.2 Add device IMEI



Add
✕

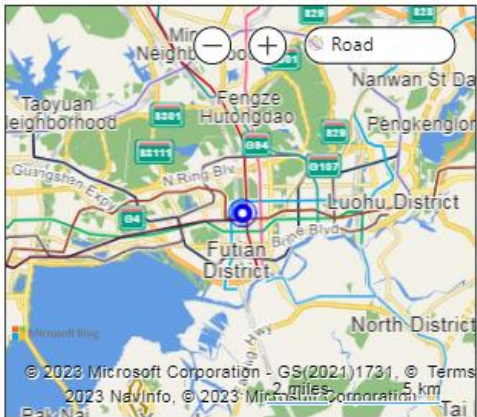
*** Device Name:**

*** Device ID:**

*** Group:**

Remark:

Device Address:



Note:
Drag the blue marker on the map to set the device address.

Cancel
Save

cloud.tzonedigital.cn/Console/Hardware/Device
tf950809 Standard

- Overview
- Real-time Monitoring
- Device Management
- Report
- Alarm Settings
- Message Center
- ACCOUNTS AND SETTINGS
- Service
- Account ID
- Personalized
- System

Q Query

#	Device Name	Device ID	Model	Group	CreateTime	Expiration	Condition	Operate
1	TT18-4G-M	699999999999911	TT18-4G-M	Default	2023/08/31 14:44:21	2023/11/29 14:44:21	Online	🔄 📄 🗑️ 📄
2	WF502B	502000000000002	WF502B	Default	2023/08/28 15:09:45	2023/11/26 15:09:45	Online	🔄 📄 🗑️ 📄
3	WF501	500122000000271	WF501	Default	2023/08/28 14:32:04	2023/11/26 14:32:04	Online	🔄 📄 🗑️ 📄
4	WF501	500122000000270	WF501	1	2023/08/28 14:31:47	2023/11/26 14:31:47	Online	🔄 📄 🗑️ 📄
5	WF502B	502000000000001	WF502B	1	2023/08/22 15:56:32	2023/11/20 15:56:32	Online	🔄 📄 🗑️ 📄
6	TT18-4G-M	180520230309001	TT18-4G-M	1	2023/08/09 09:44:22	2023/11/07 09:44:22	Offline	🔄 📄 🗑️ 📄
7	TT19	190023000000002	TT19	Default	2023/08/03 12:26:09	2023/11/01 12:26:09	Offline	🔄 📄 🗑️ 📄

Add
Delete

< 1 >

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5.3 Query data

Query method 1:

cloud.tzonedigital.cn/Console/Realtime

Cloud Platform

Real-time Monitoring

Real-time Monitoring

Device ID	Battery	Temperature	Humidity	Light	Vibration	RSSI
TT18-4G-M 699999999999911	3.74V/40%	24.1°C	65.9%	Bright	--	--
WF502B 50200000000002	3.58V/90%	30.3°C	57.5%	--	--	--
WF501 500122000000271	4.19V/100%	24.4°C	--	--	--	--
WF501 500122000000270	4.2V/100%	25.2°C	--	--	--	--

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Query method 2:

cloud.tzonedigital.cn/LoginIndex/

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TZONE

Cloud Platform

Public Device User Login

699999999999911 Search →

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cloud.tzonedigital.cn/Share?id=699999999999911

DIGITAL TECHNOLOGY

TZONE

°C English Quit

Device ID : 699999999999911

Temperature 23.9°C	Humidity 64.7%	Battery 40%	Light Bright
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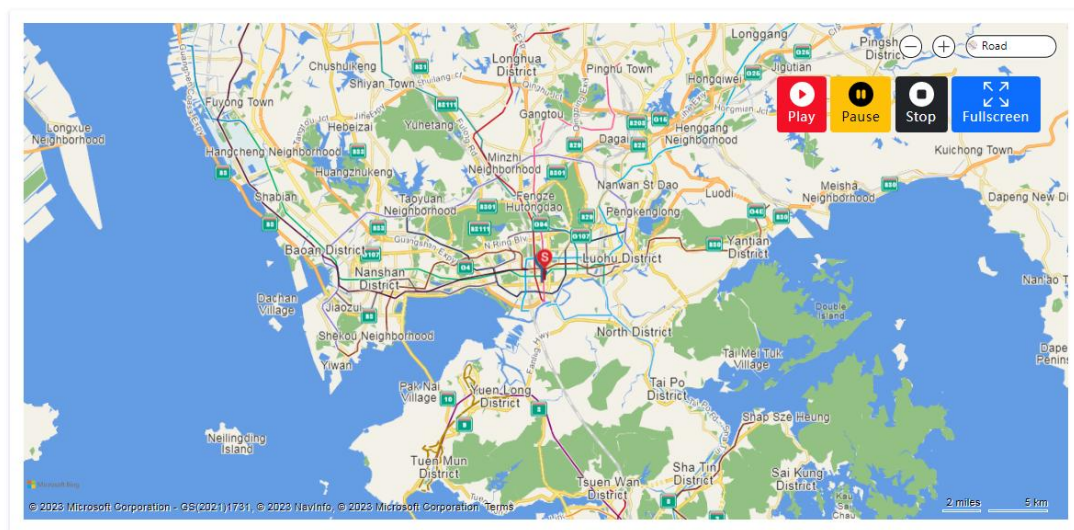
2023/08/31 14:59:36

Chart List

2023/08/24 15:05 2023/08/31 15:05 View Download

Chart

60



6. PDF report

When connect the TT18-4G-M with computer via the USB cable, it will automatically generate a PDF report including all of the temperature and humidity information.

Note: Click the **Clear Data** button on configure software can clear all of the data in the device.

DATA REPORT

ID: 123456789012345

File Information

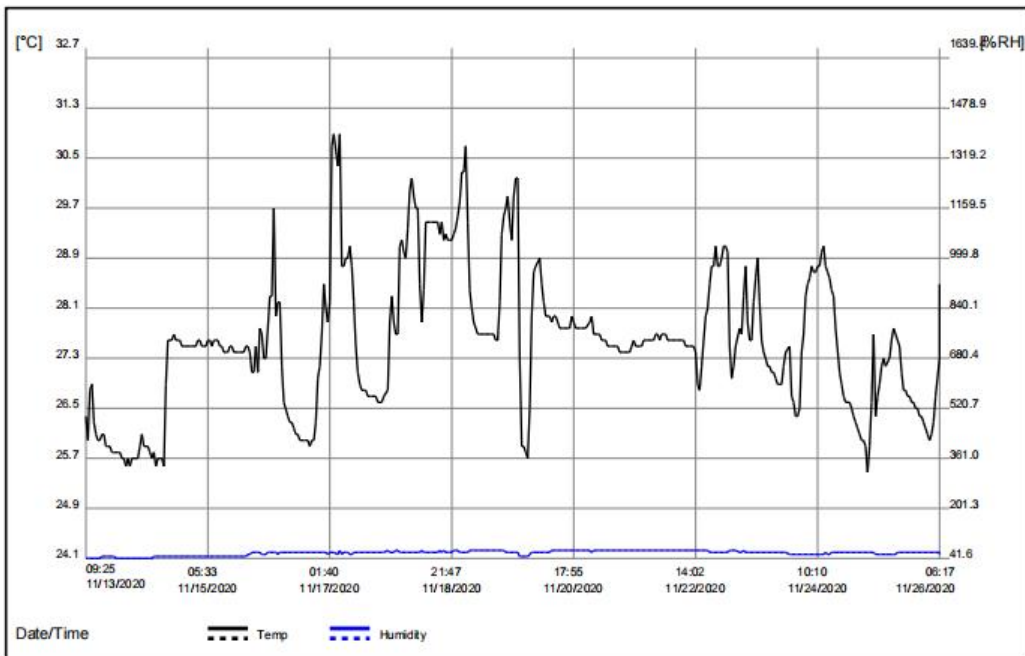
File Created Date: 11/26/20 06:26:20
 Note: All Times shown are based on UTC+0:00 and 24-Hour clock [MM/DD/YY HH:MM:SS]

Device Information

Device Type: data logger Firmware Version: 1.01
 ID: 123456789012345

Logging Summary

First Point:	11/13/20 09:25:43	Max:	31.7°C(Temp)/1638.4%RH(Humidity)
Stop Time:	11/26/20 06:17:34	Min:	25.1°C(Temp)/42.6%RH(Humidity)
Number of Points:	4103	Average:	27.5°C(Temp)/63.2%RH(Humidity)
Trip Length:	12d 20h 51m 51s	MKT:	27.6°C



Temperature&Humidity Table

Date	Time	°C	%RH	Date	Time	°C	%RH	Date	Time	°C	%RH	Date	Time	°C	%RH	Date	Time	°C	%RH
11/13/2020	09:25:43	26.4	43.3	11/13/2020	16:10:57	26.0	48.3	11/14/2020	00:10:57	25.8	45.5	11/14/2020	06:55:48	26.0	46.2	11/14/2020	14:30:42	27.1	49.5
11/13/2020	09:27:11	26.4	43.3	11/13/2020	16:15:57	25.9	48.2	11/14/2020	00:15:57	25.7	45.6	11/14/2020	07:00:48	25.9	46.4	11/14/2020	14:35:42	27.3	49.1
11/13/2020	09:32:11	26.2	43.0	11/13/2020	16:20:57	26.0	48.6	11/14/2020	00:20:57	25.6	45.7	11/14/2020	07:00:57	25.9	46.4	11/14/2020	14:40:42	27.3	48.7
11/13/2020	09:33:39	26.4	42.9	11/13/2020	16:25:57	26.0	48.4	11/14/2020	00:21:05	25.6	45.7	11/14/2020	07:05:57	26.0	46.3	11/14/2020	14:45:42	27.1	49.1
11/13/2020	09:38:39	26.0	43.5	11/13/2020	16:30:57	26.0	48.4	11/14/2020	00:26:05	25.7	45.6	11/14/2020	07:10:57	25.9	46.5	11/14/2020	14:50:42	27.4	48.5
11/13/2020	09:43:39	25.9	43.5	11/13/2020	16:35:57	26.0	48.4	11/14/2020	00:31:05	25.6	45.6	11/14/2020	07:12:01	25.9	46.5	11/14/2020	14:55:42	27.5	48.4
11/13/2020	09:48:39	25.9	43.8	11/13/2020	16:40:57	26.0	48.5	11/14/2020	00:36:05	25.6	45.6	11/14/2020	07:17:01	25.8	46.6	11/14/2020	15:00:42	27.5	48.3
11/13/2020	09:53:39	25.8	44.0	11/13/2020	16:45:57	25.9	48.3	11/14/2020	00:41:05	25.7	45.4	11/14/2020	07:22:01	26.0	46.3	11/14/2020	15:05:42	27.7	47.8
11/13/2020	09:58:39	25.8	44.1	11/13/2020	16:50:57	25.9	48.4	11/14/2020	00:46:05	25.8	45.2	11/14/2020	07:27:01	25.8	46.6	11/14/2020	15:10:42	27.8	48.0
11/13/2020	10:03:16	26.1	49.2	11/13/2020	16:55:57	25.9	48.3	11/14/2020	00:51:05	25.8	45.1	11/14/2020	07:32:01	25.9	46.6	11/14/2020	15:15:42	27.8	47.9
11/13/2020	10:03:18	26.1	49.2	11/13/2020	17:00:57	25.9	48.3	11/14/2020	00:56:05	25.7	45.2	11/14/2020	07:37:01	25.8	46.9	11/14/2020	15:20:42	27.7	48.4
11/13/2020	10:03:44	26.3	45.1	11/13/2020	17:05:57	25.9	48.6	11/14/2020	01:01:05	25.7	45.2	11/14/2020	07:37:11	25.8	46.9	11/14/2020	15:25:42	27.6	48.0
11/13/2020	10:03:47	26.3	45.1	11/13/2020	17:10:57	26.0	48.4	11/14/2020	01:06:05	25.7	45.3	11/14/2020	07:38:54	26.2	46.2	11/14/2020	15:30:42	27.5	48.6
11/13/2020	10:05:09	26.7	44.7	11/13/2020	17:15:57	26.0	48.6	11/14/2020	01:11:05	25.7	45.3	11/14/2020	07:43:54	26.0	46.5	11/14/2020	15:35:42	27.7	48.0
11/13/2020	10:05:26	26.7	44.7	11/13/2020	17:20:57	25.9	48.5	11/14/2020	01:16:05	25.6	45.4	11/14/2020	07:48:54	25.9	46.8	11/14/2020	15:40:42	27.4	48.6
11/13/2020	10:06:13	26.9	42.7	11/13/2020	17:25:57	25.9	48.4	11/14/2020	01:21:05	25.7	45.2	11/14/2020	07:53:54	25.7	47.0	11/14/2020	15:45:42	27.5	48.3
11/13/2020	10:06:30	26.9	42.7	11/13/2020	17:30:57	25.9	48.5	11/14/2020	01:26:05	25.6	45.2	11/14/2020	07:54:04	25.7	47.0	11/14/2020	15:50:42	27.8	47.7
11/13/2020	10:06:40	27.0	42.7	11/13/2020	17:35:57	25.9	48.4	11/14/2020	01:31:05	25.7	45.0	11/14/2020	07:55:42	26.0	46.5	11/14/2020	15:55:42	27.9	47.8
11/13/2020	10:07:22	27.1	42.6	11/13/2020	17:40:57	25.9	48.3	11/14/2020	01:36:05	25.8	44.8	11/14/2020	08:00:42	25.9	46.8	11/14/2020	16:00:42	27.8	47.9
11/13/2020	10:07:24	27.1	42.6	11/13/2020	17:45:57	25.9	48.3	11/14/2020	01:41:05	25.7	45.0	11/14/2020	08:05:42	25.8	47.1	11/14/2020	16:05:42	27.7	48.5
11/13/2020	10:07:29	27.1	42.6	11/13/2020	17:50:57	25.9	48.5	11/14/2020	01:46:05	25.6	45.2	11/14/2020	08:10:42	25.7	47.2	11/14/2020	16:10:42	27.6	48.1
11/13/2020	10:08:54	27.4	45.3	11/13/2020	17:55:57	25.9	48.5	11/14/2020	01:51:05	25.6	45.2	11/14/2020	08:15:42	25.9	46.8	11/14/2020	16:15:42	27.6	48.2
11/13/2020	10:13:54	27.1	43.0	11/13/2020	18:00:57	25.9	48.5	11/14/2020	01:56:05	25.7	45.1	11/14/2020	08:20:42	25.8	47.2	11/14/2020	16:20:42	27.5	48.6
11/13/2020	10:17:53	27.0	43.7	11/13/2020	18:05:57	25.9	48.5	11/14/2020	02:01:05	25.6	45.2	11/14/2020	08:25:42	25.8	47.6	11/14/2020	16:25:42	27.6	48.3
11/13/2020	10:18:34	27.0	44.1	11/13/2020	18:10:57	25.9	48.4	11/14/2020	02:06:05	25.6	45.2	11/14/2020	08:30:42	25.8	47.5	11/14/2020	16:30:42	27.5	48.5
11/13/2020	10:19:15	27.1	43.7	11/13/2020	18:15:57	25.9	48.4	11/14/2020	02:11:05	25.6	45.1	11/14/2020	08:35:42	25.9	47.2	11/14/2020	16:35:42	27.7	48.2
11/13/2020	10:24:15	26.8	43.9	11/13/2020	18:20:57	25.9	48.2	11/14/2020	02:16:05	25.9	44.6	11/14/2020	08:40:42	25.7	47.6	11/14/2020	16:40:42	27.8	47.9
11/13/2020	10:29:15	26.8	43.9	11/13/2020	18:25:57	25.9	48.2	11/14/2020	02:21:05	25.8	44.8	11/14/2020	08:45:42	25.6	47.9	11/14/2020	16:45:42	27.9	48.1
11/13/2020	10:34:15	26.7	44.4	11/13/2020	18:30:57	25.9	48.3	11/14/2020	02:26:05	25.8	44.8	11/14/2020	08:50:42	25.6	48.0	11/14/2020	16:50:42	27.8	48.2
11/13/2020	10:39:15	26.6	44.5	11/13/2020	18:35:57	25.9	48.3	11/14/2020	02:31:05	25.7	44.9	11/14/2020	08:55:42	25.9	47.2	11/14/2020	16:55:42	27.6	48.6
11/13/2020	10:44:15	26.7	44.1	11/13/2020	18:40:57	25.9	48.4	11/14/2020	02:36:05	25.7	45.0	11/14/2020	09:00:42	25.8	47.5	11/14/2020	17:00:42	27.5	48.7
11/13/2020	10:49:15	26.5	44.3	11/13/2020	18:45:57	25.9	48.3	11/14/2020	02:41:05	25.7	44.9	11/14/2020	09:05:42	25.8	47.7	11/14/2020	17:05:42	27.5	48.8
11/13/2020	10:54:15	26.4	44.4	11/13/2020	18:50:57	25.8	48.4	11/14/2020	02:46:05	25.7	44.9	11/14/2020	09:10:42	25.8	47.8	11/14/2020	17:10:42	27.4	48.9
11/13/2020	10:59:15	26.4	44.4	11/13/2020	18:55:57	25.8	48.3	11/14/2020	02:51:05	25.8	44.7	11/14/2020	09:15:42	25.9	47.7	11/14/2020	17:15:42	27.7	48.4
11/13/2020	11:04:15	26.3	44.6	11/13/2020	19:00:57	26.0	47.9	11/14/2020	02:56:05	25.7	45.0	11/14/2020	09:20:42	26.0	47.5	11/14/2020	17:20:42	27.6	48.7
11/13/2020	11:09:15	26.4	44.4	11/13/2020	19:05:57	25.9	48.2	11/14/2020	03:01:05	25.8	44.7	11/14/2020	09:25:42	25.8	47.8	11/14/2020	17:25:42	27.7	48.3
11/13/2020	11:14:15	26.5	44.3	11/13/2020	19:10:57	25.9	48.1	11/14/2020	03:06:05	25.8	44.9	11/14/2020	09:30:42	25.8	47.9	11/14/2020	17:30:42	27.8	48.4
11/13/2020	11:19:15	26.4	44.5	11/13/2020	19:15:57	25.9	48.4	11/14/2020	03:11:05	25.8	44.0	11/14/2020	09:35:42	25.7	48.1	11/14/2020	17:35:42	27.8	48.5