UbiBot GS1-PL4G1RS
Industrial-Grade WIFI SIM Temperature Humidity Light GPS Data Logger IoT System

SKU: UBIGS1PL4G1RS
Manufacture Warranty period: 12 months
Country of Origin: China

Introduction

UBIBOT GS1-PL4G1RS is an advanced version of the GS1-AL4G1RS. GS1-PL4G1RS supports WiFi and Cellular connection and also has a GPS positioning module for real-time location tracking, which makes it suitable for purposes where real-time tracking is required, like logistic vehicles, transport vehicles, etc. An external BD GPS Active Antenna is connected to the device, which allows for the reception of satellite signal. Users will be able to monitor not only the physical location of moving refrigerated vehicles but also the temperature & humidity of their environment. The route of the moving vehicle can be recorded and sent to the platform via the mobile data network.

UBIBOT GS1-PL4G1RS has built-in temperature, humidity, and ambient light sensors. It supports multiple RS485 external probes; only one of each type can be connected at a time.

*GS1-PL4G1RS-1DS has the same features as UBIBOT GS1-PL4G1RS. Besides RS485 probes, it can also support 1 x DS18B20-Audio Temperature Probe, and only one of each type of probe can be connected at a time; Wind Speed Sensor is incompatible with DS18B20-Audio Temperature Proe.

Features

- Built-in temperature, humidity, and ambient light sensors
- 2.4 GHz WiFi and mobile GPRS/3G/4G 2 types of connection, no need of hubs or gateways.
- Includes a GPS positioning module for real-time location tracking
- Industrial-grade shell, strong and durable; IP65 water-resistant for outdoor use
- 4" high-quality LCD screen displaying current environmental conditions
- Free App & Web Console to access and monitor real-time data remotely, no subscription fee
- UbiBot cloud storage for historical data; free historical data export
- Multiple ways of receiving real-time alerts: App notifications, emails, phone calls, SMS, HTTP
- Working with IFTTT, Google Sheet, Alexa
- Supporting multiple RS485 external probes, but only one of each type can be connected at a time; GS1-PL4G1RS-1DS also supports DS18B20-Audio Temperature Probe
- Easy setup with free UbiBot App or PC tools
- Memory with a capacity of 300,000 records stores all data even if the network is temporarily disconnected, which ensures there are no gaps in the data history.

- Three types of power supply: internal lithium battery, Type-C 5V (USB cable provided), and DC 12V (not included).
- Compliance with CE, EN 12830, FCC, FDA CFR21, IC, RCM, RoHS, TELEC.

NOTE

- For WiFi connection, GS1-PL4G1RS can only work with a 2.4 GHz WiFi network. 5 GHz WiFi is not supported.
- The location tracking feature is only for long-distance transportation purposes; the positioning accuracy is 50-100 meters.
- It supports multiple RS485 external probes; only one of each type can be connected at a time. GS1-PL4G1RS-1DS also supports 1 x DS18B20-Audio Temperature Probe, while Wind Speed Sensor is incompatible with DS18B20-Audio Temperature Probe.
- We provide a free UbiBot Global SIM Card for each UBIBOT GS1-PL4G1RS device.
- GS1-PL4G1RS is IP 65 waterproof, but not resistant to high humidity over 90%

Applications

- Online real-time detecting temperature, humidity and light level
- Coldstorge transpostation

Package includes

1 x GS1-PL4G1RS device
1 x External BD GPS Active Antenna
1 x Manual book
1 x Type-C USB cable (1m)

Other Specifications

Screen Size	4''
Colour	White
Material	Flame resistant ABS+PC
Switch Type	button
Power Source	Internal Lithium batteries, Type C USB, DC 5V-12V/2A charger
Battery Capacity	2900 mAh
Dimensions	11.5 x 9 x 5.5 cm
Weight	475g ± 3g

Specifications

Temperature	
Range:	-20℃ to 60℃ (-4℉ to 140℉)
Typical Accuracy:	±0.3℃

Humidity	
Range:	10% to 90%, No condensation
Typical Accuracy:	±3%RH

Ambient Light	
Range:	0 to 83,000 lux
Typical Accuracy:	±2%

Networks	
Operation System	iOS 11+, Android 8.1+, or Windows 7+, or masOS v10.8+
Memory	300,000 sensor records
WiFi Information	supports 20MHz or "Auto" setting supports OPEN, WEP, or WPA/WPA2 types, WPA2-Enterprise (802.1x / RADIUS authentication) network is not supported, requires 2.4GHz (802.11 b/g/n), channels 1-13 (5GHz WiFi NOT supported)
Mobile Networks	Supports GPRS/3G/4G (micro SIM). SIM card is not provided
LTE FDD	B1/B3/B5/B8
LTD TDD	B34/B38/B39/B40/B41
WCDMA	B1/B5/B8
GSM	900/1800 MHz

BD GPS Active Antenna	
Model:	TXGB-ZA-300
Frequency:	1561.098/1575.42 MHz
Band Width:	±10 MHz
Gain:	28 dB Typical
DC Voltage:	3.0~5.0V

External Probes & Accessories
(Optional)
(With splitters, it supports multiple RS485 probes)
- TH30S-B Temperature and Humidity Probe
- Soil Temperature and Moisture Sensor
- PT 100 Industrial-grade Temperature Probe
- Wind Speed Sensor
- CO2 Probe
- ONLY Model No. GS1-PL4G1RS-1DS supports 1 x DS18B20-Audio Temperature Probe

NOTE:
- Only 1 RS485 probe can be connected at a time.
- For GS1-PL4G1RS-1DS, Wind Speed Sensor is incompatible with DS18B20-Audio Temperature Probe.

External Probes Supported

Supporting TH30S-B, Soil Probe, PT-100, Wind Speed Sensor, CO2 Probe; only one of each type can be connected at a time. ONLY the model GS1-PL4G1RS-1DS supports DS18B20-Audio Temperature Probe, while Wind Speed Sensor is incompatible with DS18B20-Audio Temperature Probe.

⚠ Supports up to 5 probes simultaneously, 1 of each type.
The TH30S-B probe is not compatible with CO2 on some models.
For details, please contact us for specific instructions.

- Data sync via WiFi & SIM connectivity
- 24/7 temperature & humidity monitoring
- Waterproof, durable in extremely humid environments
- Multiple power supply methods
- Larger internal storage with up to 300,000 records
- No hub required
- positioning pf logistic vehicles and transport vehicles etc

Industrial-grade Environmental Sensor
7/24 monitoring and data synchronisation to the platform

- Cloud-based Storage
- Easy to access from anywhere
- Free report export
- Remote visualisation
- Device position

Multiple modes of alert offer you more options and ensure you won't miss any important notifications.

Specifications of Each Version

	GS1-A	GS1-AL4G1RS	GS1-AETH1RS	GS1-PL4G1RS
Data transmission	WiFi	WiFi, 4G	WiFi, RJ45 Ethernet cable	WiFi, 4G GPS Active Antenna
Internal Sensors	Temperature, humidity	Temperature, humidity, light	Temperature, humidity	Temperature, humidity, light
External Sensors	\	Embedded with RS485 interface for external probes		Embedded with GPS Active Antenna for position
Use cases (recommended)	Most of environments	agriculture	Cold chain storage, server room	Logistic vehicles, transport vehicles
IP Rating	IP65		\	IP65

The cloud-based IoT platform

UbiBot ® offers a revolutionary way to monitor environmental conditions where they matter. The sensors synchronize data to UbiBot ® IoT Platform using WiFi, Cellular or Ethernet connection (depending on the specific model purchased). Users can then access data from anywhere via a smartphone or the Web console.

Features:

- **Data Management:** Manage all your IoT data in one place; you could add as many devices as you want to one UbiBot account.
- **Unlimited Storage:** Unlimited cloud-based storage ensures you will never run out of space. This allows you to view all your historical data via UbiBot App or Web.
- **Free App & Web Console:** Using UbiBot App and Web Console is free. Powerful and thoughtful features provide you brilliant experience.
- **Analysis and Visualization:** Use powerful analysis and visualization tools to get the most out of your data; spot trends and direct comparisons.
- **Real-Time Alerts:** Fully customizable alert system will notify you via App notifications, emails, phone call/SMS, HTTP whenever any metric goes out of the range preset.
- **Highly Secure Platform:** UbiBot IoT platform is designed to keep all your data secure so you never have to worry about hackers or other security issues.
- **Working with IFTTT, Alexa, Google Assistant, Google Sheet**
- Compliant with FDA CFR21

Details:

Real-time and history data
The UbiBot Platform is a cloud-based IoT platform where all measured data is uploaded and stored. UbiBot App and Web Console allow you to view current data as well as historical data in graphs.

Customizable alerts and bulk operation
Setting and receiving alerts on your devices helps you to get notified of the conditions timely. When you have many devices to manage, it's time-consuming to set each alert rule one by one. Therefore, we've developed a bulk operation module with which you can set the same rule for many devices at a time.

Data export
On UbiBot Platform, you can download the history data in CSV or PDF format. The CSV file only contains raw data, while the PDF file is a summarized report with average, maximum and minimum value within the chosen period. The PDF file is much easier to read and archive.

Device sharing and bulk operation
For business users, centralized control over multiple devices is available, with no limit on the number of devices in one account. Also available are bulk operations that apply to sensor settings, alerts, and remote control routines. Devices can be shared with other people, which allows for distributed management by different colleagues.

Intelligent automation in UbiBot platform
UbiBot is committed to building intelligent industrial and home ecosystems. By integrating temperature and humidity sensors and the smart plug SP1 in one system, automated operation is achieved through data linkage. For example, fans can be switched on when the temperature rises to 30 °C.
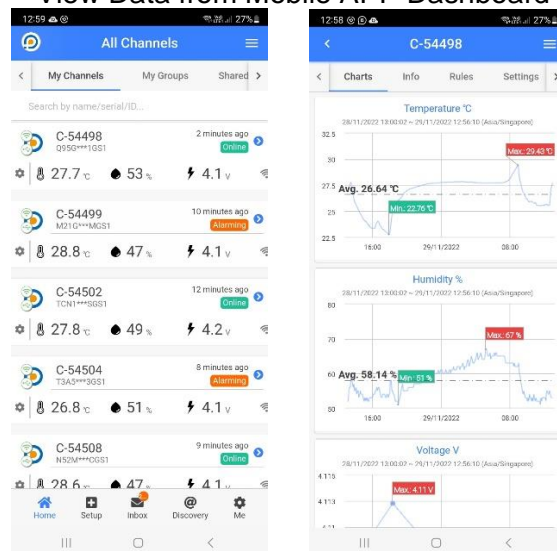
Data forwarding
UbiBot is an open platform that provides cloud-based services while supporting customers to use their own storage servers. With the data forwarding service, you can forward the data collected by your device to your own private URL to protect privacy.
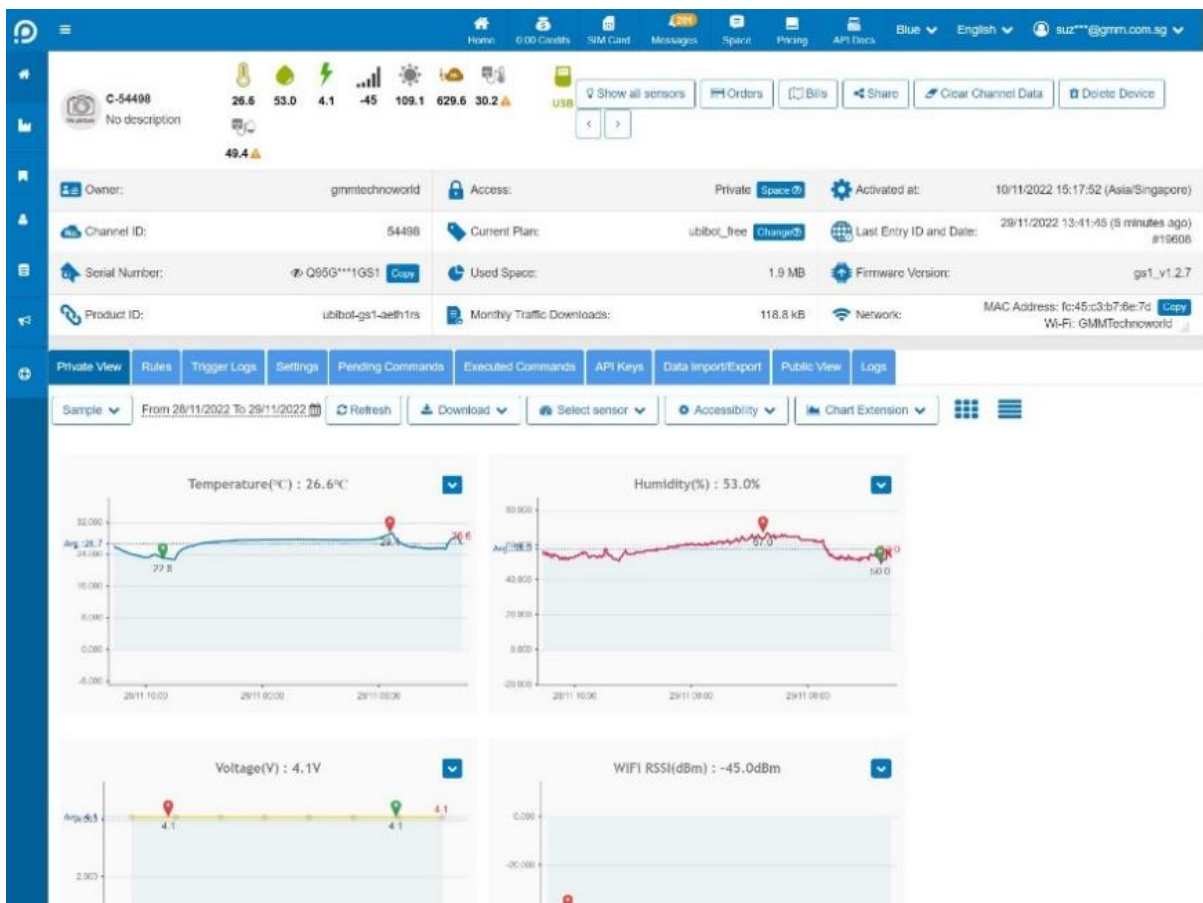
Platform-based calibration
UbiBot platform supports data calibration both on the platform level as well as the device level. One-step calibration, instant display, no impact on historical data.

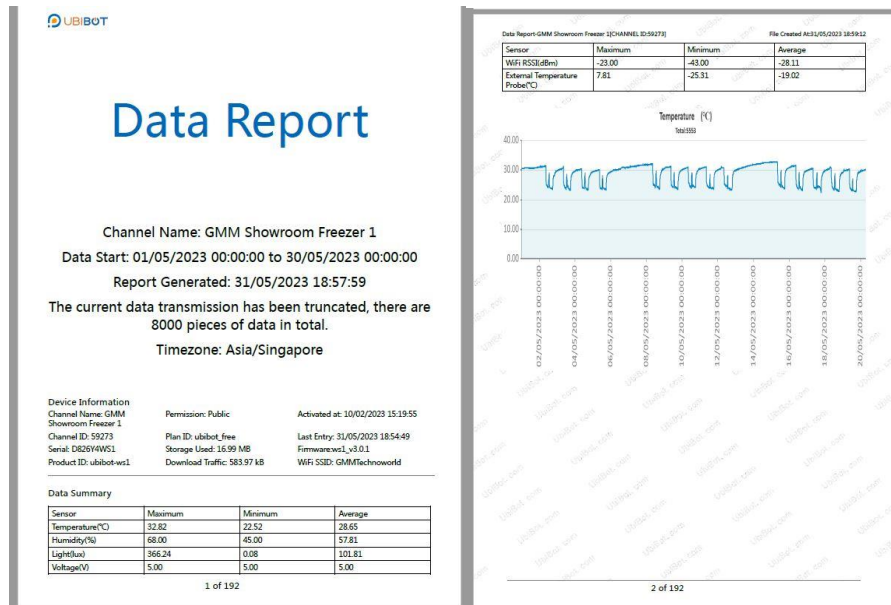### View Data from Mobile APP Dashboard

View Data from PC Dashboard

Download Data in Excel or PDF Format

created_at	field1 (Temperature ºC)	field2 (Humidity)	field3(Light)	field4(Voltage)
2019-05-27T15:28:08+08:00	25.88121	60	81.639999	5
2019-05-27T15:28:10+08:00	25.894562	60	76.439995	5
2019-05-27T15:28:12+08:00	25.937286	61	76.919998	5
2019-05-27T15:28:14+08:00	25.937286	61	79.5	5
2019-05-27T15:28:15+08:00	25.96666	62	77.799995	5
2019-05-27T15:28:16+08:00	25.96666	62	75.919998	5
2019-05-27T15:28:18+08:00	26.006714	62	76.860001	5
2019-05-27T15:28:19+08:00	26.022736	62	77.720001	5
2019-05-27T15:28:25+08:00	26.121536	63	78.540001	5
2019-05-27T15:28:47+08:00	26.404594	60	97.439995	5
2019-05-27T15:28:51+08:00				
2019-05-27T15:29:47+08:00	26.615547	58	78.939995	
2019-05-27T15:30:47+08:00	26.658272	58	86.559998	
2019-05-27T15:31:47+08:00	26.700996	57	96.839996	
2019-05-27T15:32:47+08:00	26.700996	57	84.479996	
2019-05-27T15:33:47+08:00	26.743721	57	83.279999	

UBIBOT

Data Report

Channel Name: GMM Showroom Freezer 1

Data Start: 01/05/2023 00:00:00 to 30/05/2023 00:00:00

Report Generated: 31/05/2023 18:57:59

The current data transmission has been truncated, there are 8000 pieces of data in total.

Timezone: Asia/Singapore

Device Information

Channel Name: GMM Showroom Freezer 1	Permission: Public	Activated at: 10/02/2023 15:19:55
Channel ID: 59273	Plan ID: ubibot_free	Last Entry: 31/05/2023 18:54:49
Serial: D826Y4WS1	Storage Used: 16.99 MB	Firmware: ws1_v3.0.1
Product ID: ubibot-ws1	Download Traffic: 583.97 kB	WiFi SSID: GMMTechnoworld

Data Summary

Sensor	Maximum	Minimum	Average
Temperature(°C)	32.82	22.52	28.65
Humidity(%)	68.00	45.00	57.81
Light(lux)	366.24	0.08	101.81
Voltage(V)	5.00	5.00	5.00

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Data Report-GMM Showroom Freezer 1[CHANNEL ID:59273]   File Created At:31/05/2023 18:59:12

Sensor	Maximum	Minimum	Average
WiFi RSSI(dBm)	-23.00	-43.00	-28.11
External Temperature Probe(°C)	7.81	-25.31	-19.02

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Data Report-GMM Showroom Freezer 1[CHANNEL ID:59273]   File Created At:31/05/2023 18:59:12

GMM Showroom Freezer 1(Channel ID: 59273) Temperature(°C)
From 01/05/2023 00:00:00 to 30/05/2023 00:00:00

Entry	Created At	Temperature	Entry	Created At	Temperature	Entry	Created At	Temperature
1	01/05/2023 00:03:56	30.45	44	01/05/2023 03:38:59	30.59	87	01/05/2023 07:14:01	30.66
2	01/05/2023 00:08:55	30.59	45	01/05/2023 03:43:59	30.52	88	01/05/2023 07:19:01	30.60
3	01/05/2023 00:13:55	30.56	46	01/05/2023 03:48:59	30.50	89	01/05/2023 07:24:01	30.70
4	01/05/2023 00:18:56	30.53	47	01/05/2023 03:53:59	30.55	90	01/05/2023 07:29:01	30.66
5	01/05/2023 00:23:56	30.59	48	01/05/2023 03:58:59	30.55	91	01/05/2023 07:34:01	30.69
6	01/05/2023 00:28:56	30.50	49	01/05/2023 04:03:59	30.53	92	01/05/2023 07:39:01	30.71
7	01/05/2023 00:33:56	30.46	50	01/05/2023 04:08:59	30.69	93	01/05/2023 07:44:02	30.66
8	01/05/2023 00:38:56	30.55	51	01/05/2023 04:13:59	30.65	94	01/05/2023 07:49:02	30.65
9	01/05/2023 00:43:56	30.50	52	01/05/2023 04:18:59	30.66	95	01/05/2023 07:54:02	30.69
10	01/05/2023 00:48:56	30.50	53	01/05/2023 04:23:58	30.73	96	01/05/2023 07:59:02	30.60
11	01/05/2023 00:53:56	30.62	54	01/05/2023 04:28:58	30.73	97	01/05/2023 08:04:02	30.65
12	01/05/2023 00:58:56	30.59	55	01/05/2023 04:33:58	30.71	98	01/05/2023 08:09:02	30.73
13	01/05/2023 01:03:56	30.53	56	01/05/2023 04:38:59	30.80	99	01/05/2023 08:14:02	30.66
14	01/05/2023 01:08:56	30.59	57	01/05/2023 04:43:59	30.73	100	01/05/2023 08:19:02	30.65
15	01/05/2023 01:13:56	30.45	58	01/05/2023 04:48:59	30.74	101	01/05/2023 08:24:02	30.74
16	01/05/2023 01:18:56	30.45	59	01/05/2023 04:53:59	30.84	102	01/05/2023 08:29:02	30.65
17	01/05/2023 01:23:57	30.57	60	01/05/2023 04:58:59	30.76	103	01/05/2023 08:34:02	30.62
18	01/05/2023 01:28:57	30.50	61	01/05/2023 05:03:59	30.74	104	01/05/2023 08:39:02	30.69
19	01/05/2023 01:33:57	30.49	62	01/05/2023 05:08:59	30.81	105	01/05/2023 08:44:03	30.65
20	01/05/2023 01:38:57	30.59	63	01/05/2023 05:13:59	30.77	106	01/05/2023 08:49:03	30.63
21	01/05/2023 01:43:57	30.49	64	01/05/2023 05:18:59	30.77	107	01/05/2023 08:54:03	30.71
22	01/05/2023 01:48:57	30.46	65	01/05/2023 05:23:59	30.89	108	01/05/2023 08:59:03	30.65
23	01/05/2023 01:53:57	30.53	66	01/05/2023 05:28:59	30.74	109	01/05/2023 09:04:03	30.62
24	01/05/2023 01:58:57	30.43	67	01/05/2023 05:33:59	30.70	110	01/05/2023 09:09:03	30.69
25	01/05/2023 02:03:57	30.43	68	01/05/2023 05:39:00	30.77	111	01/05/2023 09:14:03	30.63
26	01/05/2023 02:08:57	30.56	69	01/05/2023 05:44:00	30.73	112	01/05/2023 09:19:03	30.63
27	01/05/2023 02:13:57	30.53	70	01/05/2023 05:49:00	30.70	113	01/05/2023 09:24:03	30.70
28	01/05/2023 02:18:57	30.50	71	01/05/2023 05:54:00	30.86	114	01/05/2023 09:29:03	30.69
29	01/05/2023 02:23:58	30.50	72	01/05/2023 05:59:00	30.71	115	01/05/2023 09:34:02	30.67
30	01/05/2023 02:28:58	30.50	73	01/05/2023 06:04:00	30.65	116	01/05/2023 09:39:02	30.67
31	01/05/2023 02:33:58	30.45	74	01/05/2023 06:09:00	30.73	117	01/05/2023 09:44:02	30.59
32	01/05/2023 02:38:58	30.55	75	01/05/2023 06:14:00	30.67	118	01/05/2023 09:49:03	30.60
33	01/05/2023 02:43:58	30.50	76	01/05/2023 06:19:00	30.67	119	01/05/2023 09:54:03	30.65
34	01/05/2023 02:48:58	30.52	77	01/05/2023 06:24:00	30.77	120	01/05/2023 09:59:03	30.66
35	01/05/2023 02:53:58	30.63	78	01/05/2023 06:29:00	30.73	121	01/05/2023 10:04:03	30.63
36	01/05/2023 02:58:58	30.55	79	01/05/2023 06:34:00	30.67	122	01/05/2023 10:09:03	30.73
37	01/05/2023 03:03:58	30.47	80	01/05/2023 06:39:01	30.74	123	01/05/2023 10:14:03	30.66
38	01/05/2023 03:08:58	30.55	81	01/05/2023 06:44:01	30.65	124	01/05/2023 10:19:03	30.62
39	01/05/2023 03:13:58	30.49	82	01/05/2023 06:49:01	30.65	125	01/05/2023 10:24:03	30.66
40	01/05/2023 03:18:58	30.50	83	01/05/2023 06:54:01	30.81	126	01/05/2023 10:29:03	30.59
41	01/05/2023 03:23:59	30.60	84	01/05/2023 06:59:01	30.73	127	01/05/2023 10:34:03	30.59
42	01/05/2023 03:28:59	30.56	85	01/05/2023 07:04:01	30.70	128	01/05/2023 10:39:02	30.67
43	01/05/2023 03:33:59	30.50	86	01/05/2023 07:09:01	30.77	129	01/05/2023 10:44:02	30.60

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