WSLink data upload API

For custom weather server with WSLink device

VERSION: 0.6

Feature

WSLink data upload API is for end user to develop their own web-based weather data server which collecting the weather station data of the WSLink compatible device(s)

General information

Protocol:	http or https
Port:	Default 80
Request method:	GET
Data format:	UTF8

URL formats

Parameter	Description
https://xxxxx.xxx/data/upload.php	xxxxx.xxx is user define domain name
https://xxxxx.xxx:443/data/upload.php	URL with define port (example: 443)

Upload parameters

Sensor type	Parameter	Description	Data type	Unit
	?wsid=	Device ID (user define)	string	
	&wspw=	Device password (user define)	string	
	&datetime=	YYYY-MM-DD+hh%3Amm%3Ass e.g. 2000-01-01 10:32:25 2000-01-01+10%3A32%3A25 (Can ignore this parameter if use server time)	string	
	&rbar=	Relative air pressure	float	hPa
	&abar=	Absolute air pressure	float	hPa
	&intem=	Indoor temperature	float	℃
	&inhum=	Indoor humidity	integer	%
	&inbat=	Console battery level	integer	
Type1	&t1tem=	Outdoor temperature	float	℃
	&t1hum=	Outdoor humidity	integer	%
	&t1feels=	Feels like temperature	float	℃
	&t1chill=	Wind chill temperature	float	℃
	&t1heat=	Heat index temperature	float	℃
	&t1dew=	Dew point temperature	float	℃
	&t1wdir=	Wind direction	integer	deg
	&t1ws=	Wind speed	float	m/s
	&t1ws10mav=	10 minutes average wind speed	float	m/s
	&t1wgust=	Wind gust	float	m/s

Type1	&t1rainra=	Rain rate	float	mm/h
	&t1rainhr=	Hourly rainfall	float	mm
	&t1raindy=	Daily rainfall	float	mm
	&t1rainwy=	Weekly rainfall	float	mm
	&t1rainmth=	Monthly rainfall	float	mm
	&t1rainyr=	Yearly rainfall	float	mm
	&t1uvi=	UVI	float	
	&t1solrad=	Light intensity	float	W/m^2
	&t1wbgt=	WBGT temperature	float	℃
	&t1bat=	Outdoor wireless sensor battery level (Normal=1, Low battery=0)	integer	
	&t1cn=	Outdoor wireless sensor connection status (Connected=1, No connect=0)	integer	
Type2,3,4	&t234c1tem=	CH1 temperature	float	℃
	&t234c1hum=	CH1 humidity	integer	%
	&t234c1bat=	CH1 sensor battery level (Normal=1, Low battery=0)	integer	
	&t234c1cn=	CH1 sensor connection status (Connected=1, No connect=0)	integer	
	&t234c1tp=	CH1 sensor type	integer	
	&t234c2tem=	CH2 temperature	float	℃
	&t234c2hum=	CH2 humidity	integer	%
	&t234c2bat=	CH2 sensor battery level (Normal=1, Low battery=0)	integer	
	&t234c2cn=	CH2 sensor connection status (Connected=1, No connect=0)	integer	
	&t234c2tp=	CH2 sensor type	integer	
	&t234c3tem=	CH3 temperature	float	℃
	&t234c3hum=	CH3 humidity	integer	%
	&t234c3bat=	CH3 sensor battery level (Normal=1, Low battery=0)	integer	
	&t234c3cn=	CH3 sensor connection status (Connected=1, No connect=0)	integer	
	&t234c3tp=	CH3 sensor type	integer	
	&t234c4tem=	CH4 temperature	float	℃
	&t234c4hum=	CH4 humidity	integer	%
	&t234c4bat=	CH4 sensor battery level (Normal=1, Low battery=0)	integer	
	&t234c4cn=	CH4 sensor connection status (Connected=1, No connect=0)	integer	
	&t234c4tp=	CH4 sensor type	integer	
	&t234c5tem=	CH5 temperature	float	℃
	&t234c5hum=	CH5 humidity	integer	%
	&t234c5bat=	CH5 sensor battery level (Normal=1, Low battery=0)	integer	
	&t234c5cn=	CH5 sensor connection status (Connected=1, No connect=0)	integer	
	&t234c5tp=	CH5 sensor type	integer	
	&t234c6tem=	CH6 temperature	float	℃
	&t234c6hum=	CH6 humidity	integer	%
	&t234c6bat=	CH6 sensor battery level (Normal=1, Low battery=0)	integer	
	&t234c6cn=	CH6 sensor connection status (Connected=1, No connect=0)	integer	
	&t234c6tp=	CH6 sensor type	integer	
	&t234c7tem=	CH7 temperature	float	℃
	&t234c7hum=	CH7 humidity	integer	%
	&t234c7bat=	CH7 sensor battery level (Normal=1, Low battery=0)	integer	
	&t234c7cn=	CH7 sensor connection status (Connected=1, No connect=0)	integer	
	&t234c7tp=	CH7 sensor type	integer	

Type5	&t5lst=	Last Lightning strike time	integer	
	&t5lskm=	Lightning distance	integer	km
	&t5lsf=	Lightning strike count last 1 Hours	integer	
	&t5ls5mtc=	Lightning count total of during 5 minutes	integer	
	&t5ls30mtc=	Lightning count total of during 30 minutes	integer	
	&t5ls1htc=	Lightning count total of during 1 Hour	integer	
	&t5ls1dtc=	Lightning count total of during 1 day	integer	
	&t5lsbat=	Lightning Sensor battery (Normal=1, Low battery=0)	integer	
	&t5lscn=	Lightning Sensor connection (Connected=1, No connect=0)	integer	
Type6	&t6c1wls=	Water leak sensor CH1 (Leak=1, No leak=0)	integer	
	&t6c1bat=	Water leak sensor CH1 battery (Normal=1, Low battery=0)	integer	
	&t6c1cn=	Water leak sensor CH1 connection (Connected=1, No connect=0)	integer	
	&t6c2wls=	Water leak sensor CH2 (Leak=1, No leak=0)	integer	
	&t6c2bat=	Water leak sensor CH2 battery (Normal=1, Low battery=0)	integer	
	&t6c2cn=	Water leak sensor CH2 connection (Connected=1, No connect=0)	integer	
	&t6c3wls=	Water leak sensor CH3 (Leak=1, No leak=0)	integer	
	&t6c3bat=	Water leak sensor CH3 battery (Normal=1, Low battery=0)	integer	
	&t6c3cn=	Water leak sensor CH3 connection (Connected=1, No connect=0)	integer	
	&t6c4wls=	Water leak sensor CH4 (Leak=1, No leak=0)	integer	
	&t6c4bat=	Water leak sensor CH4 battery (Normal=1, Low battery=0)	integer	
	&t6c4cn=	Water leak sensor CH4 connection (Connected=1, No connect=0)	integer	
	&t6c5wls=	Water leak sensor CH5 (Leak=1, No leak=0)	integer	
	&t6c5bat=	Water leak sensor CH5 battery (Normal=1, Low battery=0)	integer	
	&t6c5cn=	Water leak sensor CH5 connection (Connected=1, No connect=0)	integer	
	&t6c6wls=	Water leak sensor CH6 (Leak=1, No leak=0)	integer	
	&t6c6bat=	Water leak sensor CH6 battery (Normal=1, Low battery=0)	integer	
	&t6c6cn=	Water leak sensor CH6 connection (Connected=1, No connect=0)	integer	
	&t6c7wls=	Water leak sensor CH7 (Leak=1, No leak=0)	integer	
	&t6c7bat=	Water leak sensor CH7 battery (Normal=1, Low battery=0)	integer	
	&t6c7cn=	Water leak sensor CH7 connection (Connected=1, No connect=0)	integer	
Type8	&t8pm25=	PM2.5 concentration	integer	ug/m^3
	&t8pm10=	PM10 concentration	integer	ug/m^3
	&t8pm25ai=	PM2.5 AQI	integer	
	&t8pm10ai =	PM10 AQI	integer	
	&t8bat=	PM sensor battery level (0~5) remark: 5 is full	integer	
	&t8cn=	PM sensor connection (Connected=1, No connect=0)	integer	
Type9	&t9hcho=	HCHO concentration	integer	ppb
	&t9voclv=	VOC level (1~5) 1 is the highest level, 5 is the lowest VOC level	integer	
	&t9bat=	HCHO / VOC sensor battery level (0~5) remark: 5 is full	integer	
	&t9cn=	HCHO / VOC sensor connection (Connected=1, No connect=0)	integer	
Type10	&t10co2=	CO_2 concentration	integer	ppm
	&t10bat=	CO_2 sensor battery level (0~5) remark: 5 is full	integer	
	&t10cn=	CO_2 sensor connection (Connected=1, No connect=0)	integer	
Type11	&t11co=	CO concentration	integer	ppm
	&t11bat=	CO sensor battery level (0~5) remark: 5 is full	integer	
	&t11cn=	CO sensor connection (Connected=1, No connect=0)	integer	
	&apiver=	API version	float	

The upload parameters depend on the device type.

Compatible sensor list

Sensor type	Channel	Compatible sensors Types
Type1		3-in-1 rain gauge 3-in-1 wind speed sensor 5-in-1 Outdoor sensor 7-in-1 Outdoor sensor 8-in-1 Outdoor WBGT sensor
Type2,3,4	Ch1~7	Thermo-hygrometer sensor Pool sensor Soil moisture & temperature
Type5		Lightning sensor
Type6	Ch1~7	Water leak sensor
Type8		PM2.5 / 10 sensor
Type9		HCHO with VOC sensor
Type10		CO_2 sensor
Type11		CO sensor

Upload data example

https://xxxxx.xxx/data/upload.php?wsid=wsabcde123&wspw=a123456789&datetime=2000-01-01+10%3A32%3A25&rbar=1008.8&abar=990.5&intem=25.8&inhum=22&inbat=1&t1tem=38&t1hum=88&t1wdir=359&t1ws=40.1&t1ws10mav=20.9&t1wgust=49.9&t1rainra=20.8&t1rainhr=10&t1raindy=33.5&t1rainwy=15&t1rainmth=30.8&t1rainyr=40.5&t1uvi=8.8&t1solrad=679&t1bat=1&t1cn=1&t234c1tem=35.9&t234c1hum=56&t1feels=&t1chill=38&t1heat=&t1dew=33.9&t1wbgt=42.1&t234c1bat=0&t234c1cn=0&t234c1tp=2&t234c2tem=35.9&t234c2hum=56&t234c2bat=2&t234c2cn=0&t234c2tp=2&t234c3tem=35.9&t234c3hum=56&t234c3bat=1&t234c3cn=0&t234c3tp=2&t234c4tem=40.1&t234c4hum=39&t234c4bat=1&t234c4cn=0&t234c4tp=3&t234c5tem=23.6&t234c5hum=33&t234c5bat=0&t234c5cn=0&t234c5tp=3&t234c6tem=35.9&t234c6hum=57&t234c6bat=1&t234c6cn=0&t234c6tp=4&t234c7tem=18.1&t234c7hum=19&t234c7bat=2&t234c7cn=0&t234c7tp=4&t5lst=9999&t5lskm=40.1&t5lsf=30&t5ls5mtc=65536&t5ls30mtc=65536&t5ls1htc=6553336&t5ls1dtc=65536&t5lsbat=1&t5lscn=1&t6c1wls=1&t6c1bat=0&t6c1cn=0&t6c2wls=1&t6c2bat=0&t6c2cn=0&t6c3wls=1&t6c3bat=0&t6c3cn=0&t6c4wls=1&t6c4bat=0&t6c4cn=0&t6c5wls=1&t6c5bat=0&t6c5cn=0&t6c6wls=1&t6c6bat=0&t6c6cn=0&t6c7wls=1&t6c7bat=0&t6c7cn=0&t8pm25=450.5&t8pm10=300.5&t8pm25ai=999&t8pm10ai=88&t8bat=0&t8cn=0&t9hcho=1000&t9voclv=3&t9bat=0&t9cn=0&t10co2=400&t10bat=0&t10cn=0&t11co=500.0&t11bat=5&t11cn=1&apiver=1.00

Server response codes

Code	Description
200	Success
400	Bad request
401	Incorrect device id or device password
404	Too many request
405	Incorrect data format

Revision history

Version	Description	Date
0.1	Draft release	28 Apr 2023
0.2	- Change time parameter name and format - Add feels like, heat index, wind chill and dewpoint parameter - Updated the API example - Adjust the document format	12 May 2023
0.3	Add description for the sensor connection	13 Jun 2023
0.4	Add compatible sensor list	4 Jul 2023
0.5	- Add leak status description for the leak sensors - Add VOC level description	15 Sep 2023
0.6	- Add WBGT temperature parameter - Add compatible sensor types	7 Nov 2023