Data Specification for Traffic Data collected by Traffic Detectors Installed at Smart Lampposts

Traffic Speed, Volume and Road Occupancy

Data structure of the XML file for Traffic Speed, Volume and Road Occupancy is as follows:

Item	Data Type	Description	Coding
date	date	Date of data	yyyy-mm-dd
periods	**period**	Two 30s-interval included	

Details about Data Type "**period**"

Item	Data Type	Description	Coding
period_from	time	Timestamp of data period starts	HH:mm:ss
period_to	time	Timestamp of data period ends	HH:mm:ss
detectors	**detector**	List of detector	

Details about Data Type "**detector**"

Item	Data Type	Description	Coding
detector_id	String	ID of the detector	
direction	string	Direction of the detector	1. North 2. East 3. South 4. West 5. North East 6. South East 7. North West 8. South West
lanes	**lane**	List of each lane item	

Details about Data Type "**lane**"

Item	Data Type	Description	Coding
lane_id	string	Since there are 4 lanes, 3 lanes and 2 lanes carriageway, different output will be generated depends on the number of lanes on the carriageway	- With 4 Lanes 　1. Fast Lane 　2. Middle Lane 2 　3. Middle Lane 1 　4. Slow Lane - With 3 Lanes 　1. Fast Lane 　2. Middle Lane 　3. Slow Lane - With 2 Lanes 　1. Fast Lane 　2. Slow Lane - With 1 Lane 　1. Fast Lane
speed	int	Traffic speed of lane	In km/h
Occupancy*	int	Occupancy of lane	In percentage (%)
Volume	int	Traffic volume of lane	
sd	decimal	Standard deviation of speed	Rounded to the nearest 1 decimal places
valid	string	Data validity Detector Online：Y, Detector Offline：N	Y / N

*Occupancy is the percentage of time a zone is occupied by a vehicle

Data structure of the CSV file for Locations of Traffic Detectors is as follows:

Item	Data Type	Description	Coding
Device_ID	string	ID of the detector	AIDxxxxx
District	string	18 District Name	1. Central & Western 2. Eastern 3. Islands 4. Kowloon City 5. Kwai Tsing 6. Kwun Tong 7. North 8. Sai Kung 9. Sha Tin 10. Sham Shui Po 11. Southern 12. Tai Po 13. Tsuen Wan 14. Tuen Mun 15. Wan Chai 16. Wong Tai Sin 17. Yau Tsim Mong 18. Yuen Long
Road_EN	string	Road Name in English	
Road_TC	string	Road Name in Traditional Chinese	
Road_SC	string	Road Name in Simplified Chinese	
Easting	integer	X Coordinate of the detector in HK1980 Grid	
Northing	integer	Y Coordinate of the detector in HK1980 Grid	
Latitude	decimal	Latitude of the detector	
Longitude	decimal	Longitude of the detector	
Direction	string	Direction of the detector	1. North 2. East 3. South 4. West 5. North East

			6. South East
			7. North West
			8. South West
Rotation	string	Direction of the detector in degree	

Response Code:

HTTP code	Definition
200	Success.
400	Bad Request.
500	Internal Server Error.
503	The server is currently unavailable.