



Factsheet: Smart City

A technology field created by ip-search

1 Definition

Smart city is a digitalized & connected urban living environment for its citizen and visitors. Digitalized urban means the city environment being described by collected data in real-time; connected urban means the collected data being communicated to the city in real-time to facilitate the city monitoring, city administration, city responding to demand or emergency; and to perform heuristic analysis to predict potential risk to support precaution decision.

With smart infrastructure and digital service/application, a smart city provides:

- > real-time, always and ubiquitous connected citizen & visitor
- > real-time, always and ubiquitous connected vehicle or object on-the-move
- > real-time, always connected urban infrastructure (public security/safety, air quality monitor, water supply, electricity supply, school, hospital, building, house, public & private space/area, public transportation, highway, road, bridge, tunnel, railway, subway, airport, parking, lighting, etc.)
- > city data center (for real-time monitoring/analyzing/modeling/predicting city living environment)
- > smart air monitoring, sustainable environment, smart grid, renewable energy, green energy, clean tech, solar energy, wind energy, power banking, smart oil and gas, smart metering, smart water supply, dual water supply, smart water sewerage/drainage, city sanitation, smart waste treatment, waste recycling/treatment, smart waste pick-up, smart building/housing, green building/housing, smart HVAC, heat pump, smart elevator, smart mobility, smart transport, green transport, cooperative Intelligent transport system, smart parking, smart street lighting, energy generating road, pedestrian energy harvesting, smart crossing, car sharing, bicycle sharing, secured communication system, smart public safety, surveillance for critical infrastructure, fire detection, disaster risk monitoring, emergency&disaster response (notification, search, rescue), smart logistics, urban package delivery, crowd management, digital health-care, digital medical-care, e-healthcare, e-medical-care, electronic health record, telemedicine, digital education, e-education, digital content, urban modeling, digital twins, circular cities, smart space, smart governance, e-governance, e-voting, incentive governance, on-line payment, urban planning, etc.

Smart city is also named as Intelligent city, Digital city, Electronic community, Information city, Cognitive smart city, Cyber Ville, etc.

2 CPC / IPC

No restriction to patent classes.



3 Keywords

The following keyword concepts were used:

- Smart or Intelligent, City, Urban, Traffic, Parking

4 Confidence Interval for Precision

Precision is expressed in percent of relevant counts. The 95 % confidence interval for the precision of a technology field is assessed on a mix of 100 randomly selected patent families based on a binomial distribution.

Precision Confidence Interval: 53 - 75 %

5 History

Version	latest update	Comment
_06_19	20.06.2019	Added environment monitoring, green energy supply, smart water & waste management.
_11_19	29.11.2019	No changes
_03_20	09.03.2020	No changes
_09_20	20.08.2020	No changes
_03_21	09.03.2021	Significant changes in keywords (yielding strong reduction in number of documents), no restriction to patent classes
_09_21	13.08.2021	No changes

6 Contact

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