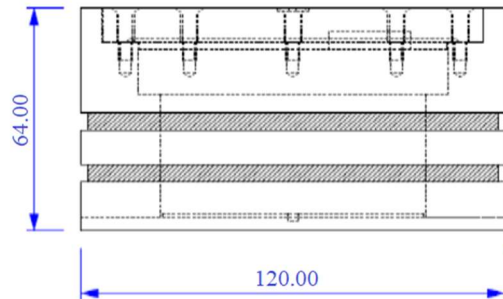


Smart System



SMART-PARK SENSOR

MAIN CHARACTERISTICS

Application	Detection of the state of occupancy of a parking lot
Installazione	Placed under the asphalt in the parking lot (see Fig.1-8)
TECHNICAL CHARACTERISTICS	
Power Supply	3.6V internal lithium batteries
Theoretical battery life	Approx. 500,000 operating cycles, where an operating cycle is: -transmission of a "keep alive" message approx. every 10 minutes (settable) -any change in the state of the parking lot
Protection Degree	IP65
Operating Temperature	-20 to +50°C
Dimensions	cylinder 120x64 mm
Case	PVC container, tin-tight, with high mechanical resistance
Sensor type	3-axis resistive ferromagnetic sensor
Mean time between failure	90.000h @ 20 °C (battery excluded)
Firmware Updating	Remotely OTA (Over The Air)
FUNCTIONAL CHARACTERISTICS	
Radio Communication	Frequency: 2.4GHz
	Standard used: IEEE 802.15.4 Transmission protocol based on this standard
	Integrated antenna
	Communication range: 40/60 meters
OPERATION	
Sensing	The highly sensitive ferromagnetic sensor detects the magnetic disturbance exerted by a vehicle parked above the sensor installation site (Fig.9)
Transmission	The state of occupancy of the parking lot is sent in real time to the control centre by means of a radio communication with the standard IEEE 802.15.4, compatible with the AEC communication network, for Smart City. (Fig.9)

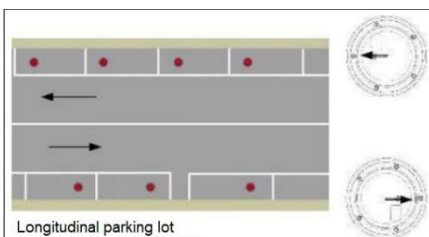


Fig. 1

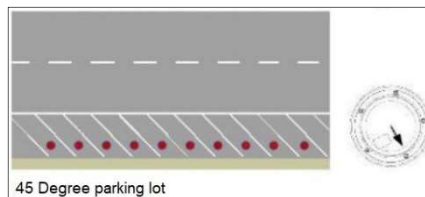


Fig. 2

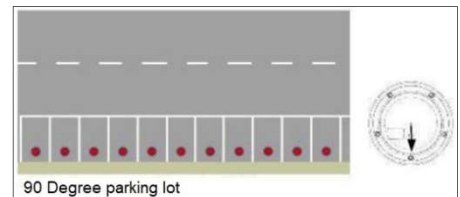


Fig. 3

Smart System

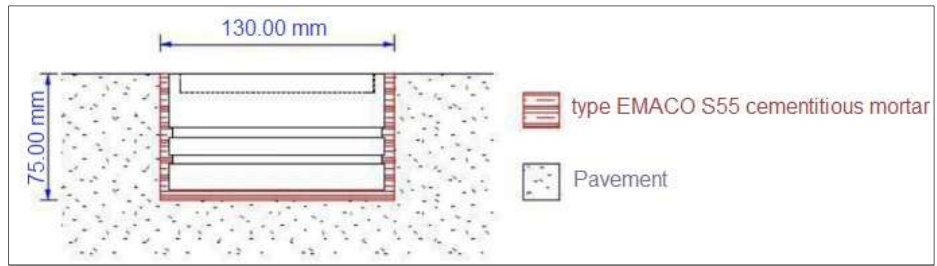


Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8

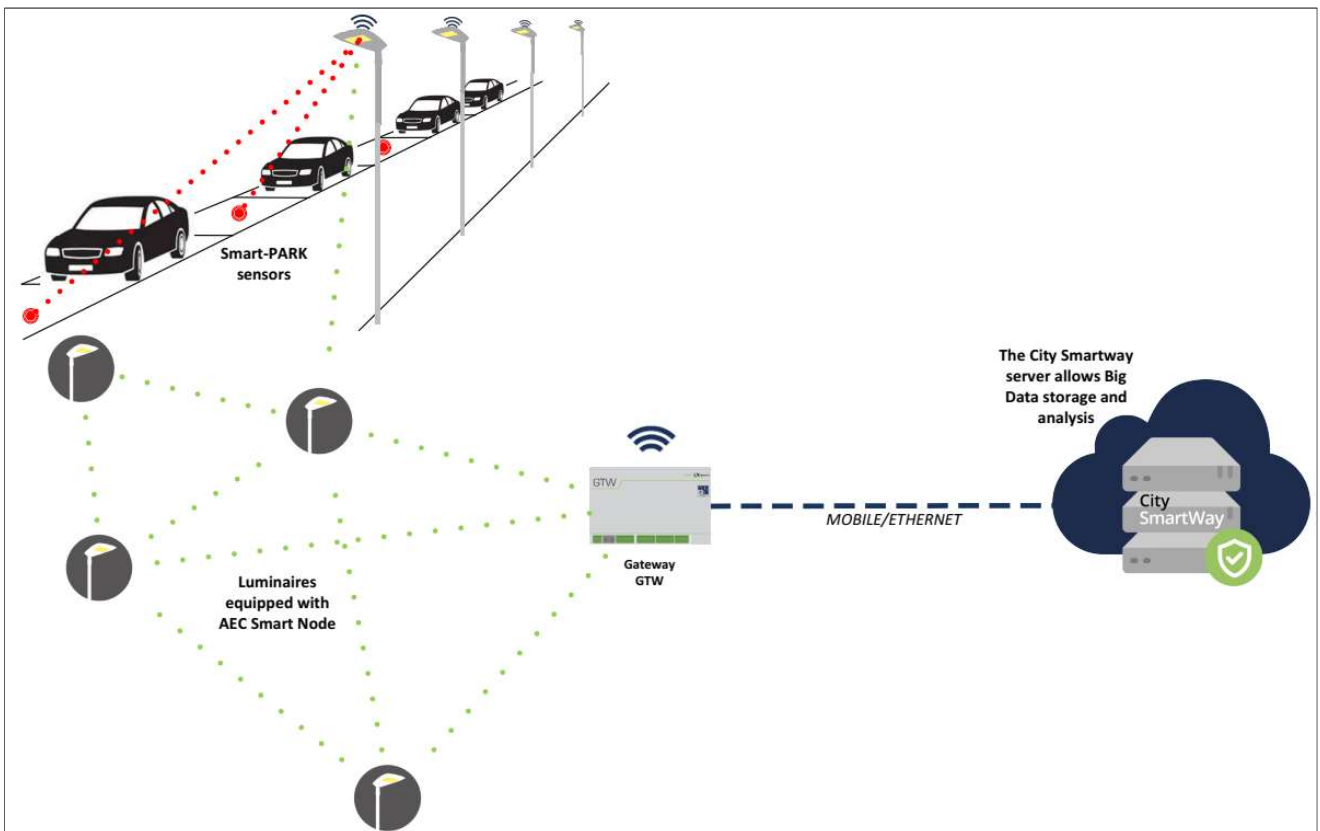


Fig. 9