

## Metrici PPD (Parking Place Detector) engine - Datasheet

Features	
Architecture	distributed detection and recognition, free-flow or triggered
Recognition rate and performance	more than 99%, using appropriate camera positioning and image settings; can recognize vehicles whose view is partially obstructed by fences, bushes, trees, people or other vehicles
Recognition enhancements	yes, depending of the size of the vehicles: low, medium, normal, high, ultra, insane
Recognition speed	less than one 400ms/ frame at high settings, using an appropriate GPU
Number of recognized vehicles in each frame	unlimited number
Maximum recommended number of defined parking spaces	20 inside, 200 outside for each camera. More possible depending on the camera placement, angles, dimensions of vehicles etc
Double parking detection	yes, detects when a car occupies two places
Delay when a parking space it changes its state	yes, user definible, 5 seconds by default
Trigger type	over UDP from Metrici Multicontroller, Barix Barionet 50 LAN Controller, from Metrici PPD web interface, or from other Metrici engine: LPR, CCR, QR, etc
Companion stream	yes
Live view	yes, 1 fps
Data type for each parking space	space id, status (available/ occupied), double parking, timestamp, x coordinate, y coordinate, object type, object subtype, camera name, location name, parking picture, companion picture
Parallel processing	adaptive multithreading, up to 8 threads for each connected camera
GPU acceleration	yes, Intel, AMD or Nvidia supported
Data push	POST method over HTTP, one event generated: reporting

<b>System requirements</b>	
OS	Linux CentOS 7 64 bits
CPU	Intel Xeon, AMD Ryzen, Threadripper or Epyc
GPU	Intel, AMD or Nvidia, mandatory for more than 2 cameras/ server
System memory	512 MB for each connected camera, but no less than 4 GB/ server
GPU memory	at least 256 MB available for each connected camera
Storage	up to 512 KB for each parking event stored into the buffer, depending of the camera resolution and image compression
Cameras/ server	up to 256 connected cameras on each server, unlimited number of servers
Camera type	IP, MJPEG, MxPEG, H.264 or H.265 video stream, HTTP or RTSP/ RTP transport protocols
Supported camera producers	ACTi, Arecont, Avigilon, Axis, Bosch, Dahua, Diviotec, Hikvision, Mobotix, Novus, Pelco, Samsung, Sony, Uniview, Vivotek