

# Parker Mobile IoT Catalogue



The Parker Mobile IoT solution creates a digital link from traditional on-machine networks to a secure cloud, and then presents information via branded, customizable, digital interfaces and reports.

This catalogue contains descriptions of Parker's Mobile IoT offerings available for sale in the Americas, Europe and select Asian markets.

Version 1

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# Table of Contents

- Page 3 Services – description of the hardware, software, and services included in the basic and premier solutions
- Page 4 Architecture – high level view of the network utilized to deliver services
- Page 5 Premium Solution – for the OEM, fleet owner, or operator that require advanced features, frequent remote connections to fielded machines, monitoring and reporting of dozens of signals at a high sampling rate
- Page 6 Standard Solution – for machines that require advanced features but at a reduced number of remote connections, signals, and reports.
- Page 7 Basic Solution – for machines that require remote connections for program updates and real time diagnostics, without condition monitoring and reporting services.
- Page 8 Service Availability – identifies global markets where Parker Mobile IoT solution is available today
- Page 9 Service Definitions
- Page 10 Solution Comparisons – provides a listing of the features and functionality of each solution.



# Parker Mobile IoT – Services

## Plug & Play Hardware

- Fully provisioned, multi-country capable SIM
- 4G LTE cellular, Wi-Fi, J1939 based protocol
- IP67 rating, mobile hardened, 2 CAN networks
- Easily connect assets to the IoT cloud w/ store and forward capabilities
- LED blink codes for status
- Combi antenna

## Integrate CAN based signals

- Select and manage CAN signals from controllers
- Flexibly synchronize and point controller signals to the cloud for easy data acquisition
- User defined signals (or form signal groups) and select frequency of transmission
- Define/export telematics signals from IQANdesign

## Reporting & Visualization

- Customizable signal grouping and dashboard
- Monitor fuel usage, engine hours, temperatures, pressures, time to service and more
- Compare machine and organization performance
- View and export historical data
- View data to support warranty claims

## Location Services

- Track and locate assets / fleets
- Bread crumbing
- Monitor productivity status
- Monitor conditions real time on web and mobile interfaces

## Real Time Diagnostics

- Manage and act upon DM1 faults and history from portal
- Integration with IQAN service and diagnostics tools
- Speed troubleshooting and repairs using remote and local diagnostics from PC or mobile apps
- Improved customer response and reduced downtime

## OTA Operations

- Real time communication with IQAN controllers
- Keep on-board programs current via OTA updates
- Manage machine software versions
- Coordinate support with experts via remote access
- Deep integration with IQAN tools for real time access: Design – for programming; Run – for service & tuning; Measure – for diagnostics

## Multi-Tier Administration

- Flexible branding styles that fits your business as well as your customer's needs
- Define multi-tier organizations
- Define user security levels access
- Move machines between hierarchical structures

## Alerts & Notifications

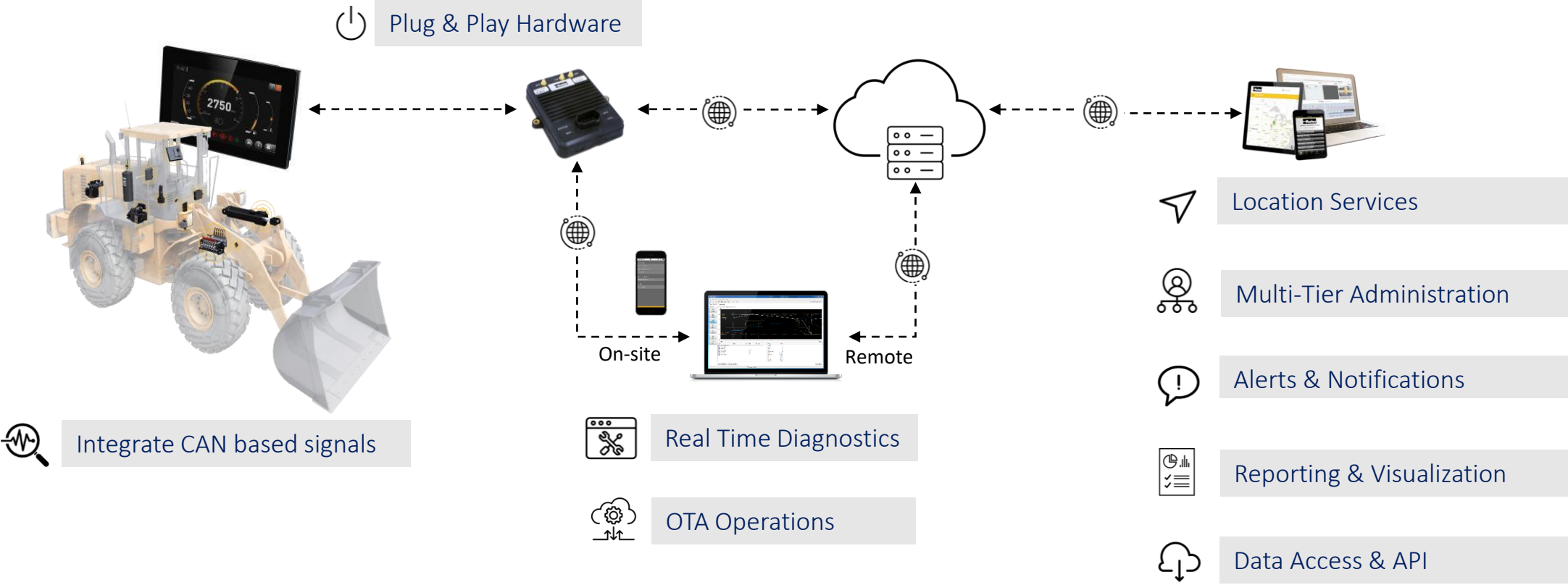
- Define signal alerts / severities
- Set multi-thresholds signal alerts
- Subscribe email and text notifications to defined personnel
- Take action upon real time alerts to improve performance and productivity.

## Data Access & APIs

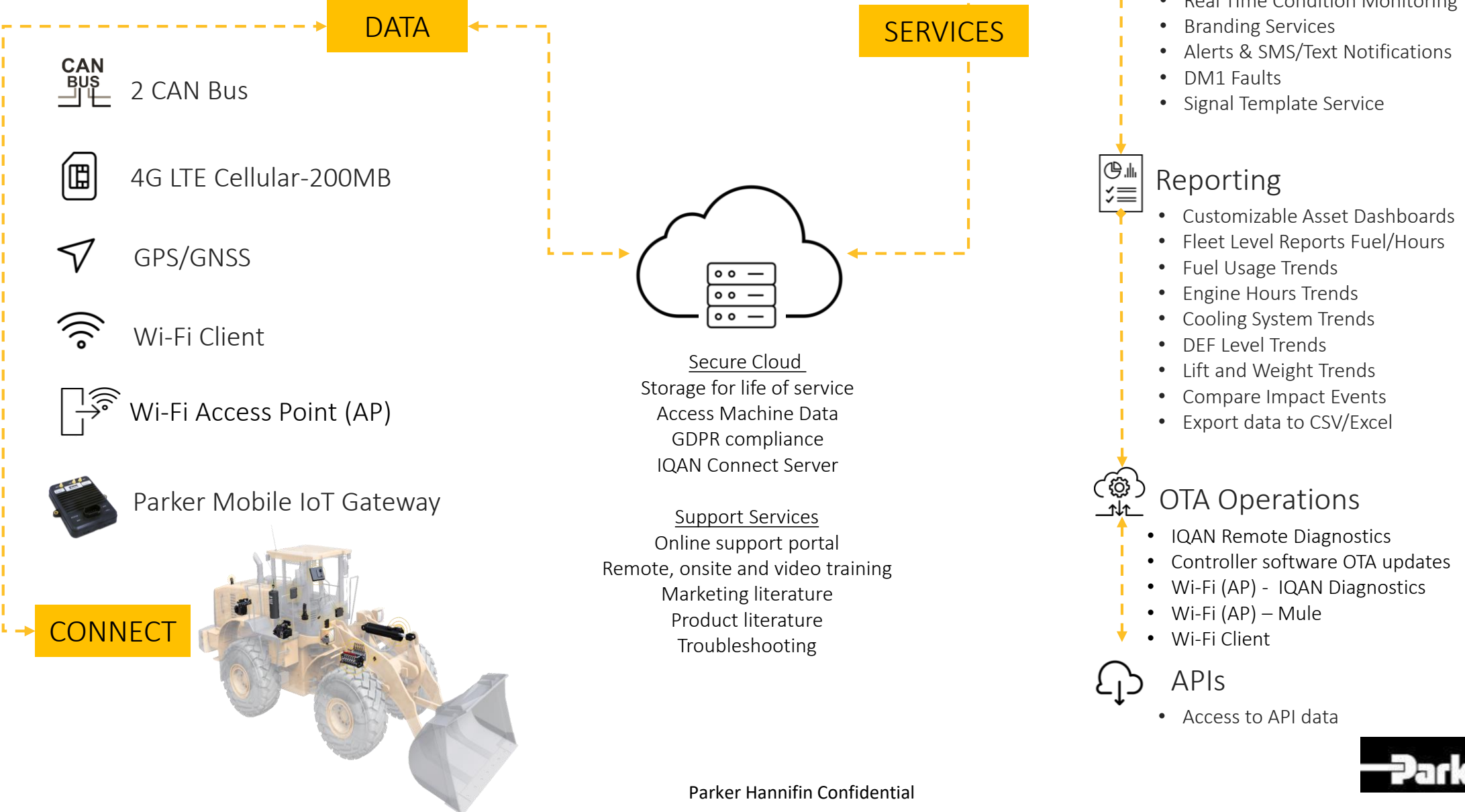
- Extract and integrate data to visualization tools or enterprises systems
- Subscribe to APIs and easily send fleet data to customer's ERP systems



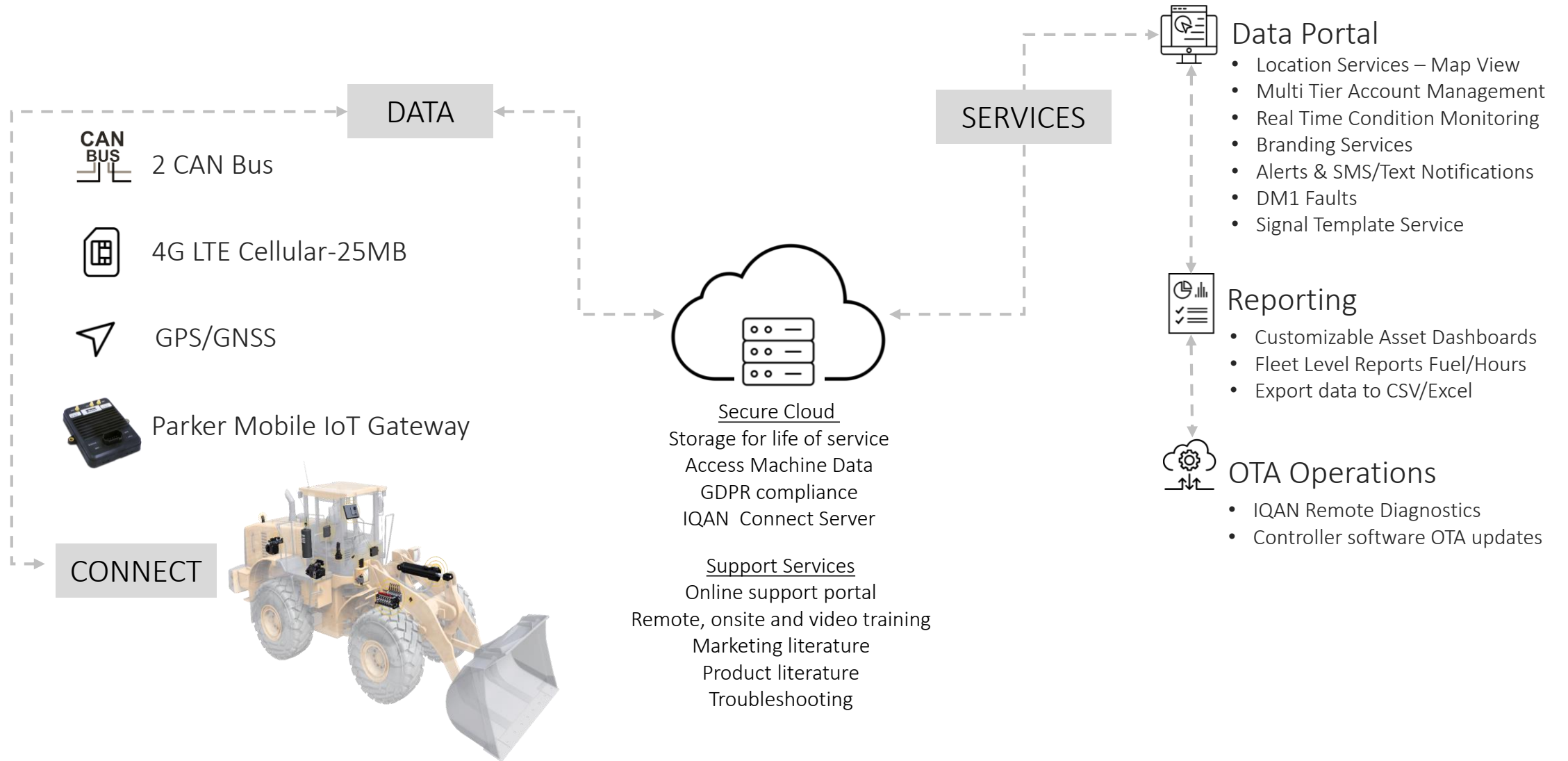
# Parker Mobile IoT – Architecture Overview



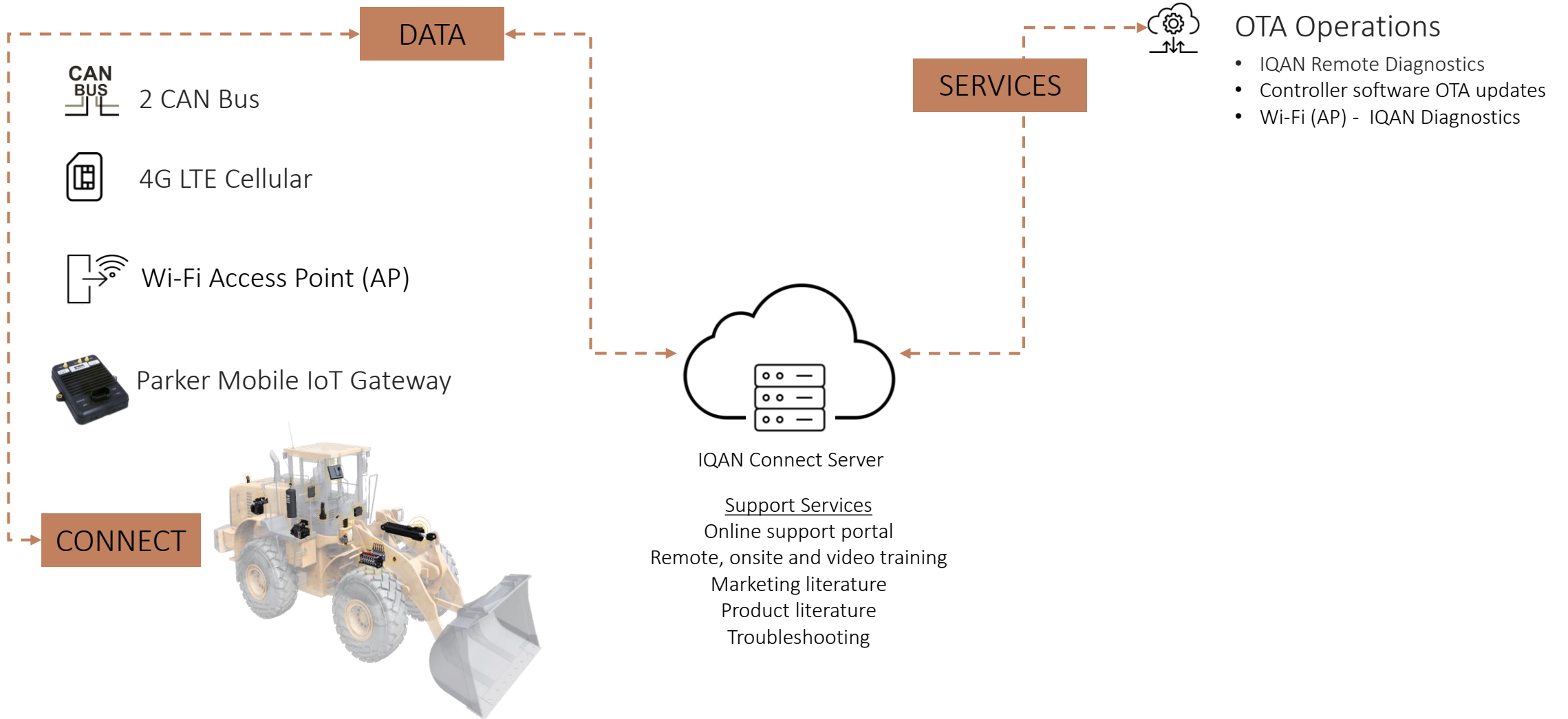
# Parker Mobile IoT – Premium Solution



# Parker Mobile IoT – Standard Solution



# Parker Mobile IoT – Basic Solution



# Service Availability

## Group A Countries



## Group B Countries

(may require additional country approval)

### Notes:

\* Customer may not use the Wireless Service with a Device in Brazil, Ethiopia, Equatorial Guinea, Egypt, India, Northern Mariana Islands, Saudi Arabia or Turkey for a period (i) that is longer than ninety (90) days and (ii) during which the Device is not used in any other country, without AT&T's advance written authorization.

\* Customer may not use the Wireless Service with a Device in Micronesia or Turkmenistan for a period (i) that is longer than ninety (90) days and (ii) during which the Device is not used in any other country, without AT&T's advance written authorization.

\*\* Customer may not use the Wireless Service with a Device in following the provinces of Thailand: Narathiwat, Pattani and Yala

\*\*\* Customer may not use the Wireless Service with a Device in the Crimea region.

Afghanistan	Bosnia and Herzegovina	El Salvador	Hungary	Macao	Oman	Somalia	Venezuela
Åland Islands	Botswana	Estonia	Iceland	Macedonia	Pakistan	South Africa	Vietnam
Albania	Brazil*	Ethiopia*	India*	Madagascar	Panama	Spain	Virgin Islands, British
Algeria	Brunei Darussalam	Faroe Island	Indonesia	Malawi	Papua New Guinea	Sri Lanka	Zambia
American Samoa	Bulgaria	Fiji	Ireland	Malaysia	Paraguay	Swaziland	Zimbabwe
Andorra	Burkina Faso	Finland	Isle of Man	Maldives	Peru	Sweden	
Angola	Burundi	France	Israel	Mali	Philippines	Switzerland	
Anguilla	Cambodia	French Guiana	Italy	Malta	Poland	Taiwan, Province of China	
Antigua and Barbuda	Cameroon	French Polynesia (Tahiti)		Martinique	Portugal	Tajikistan	
Argentina	Canada	Gabon	Jamaica	Mauritius	Qatar	Tanzania, United	
Armenia	Cayman Islands	Gambia	Japan	Mexico	Reunion	Thailand**	
Aruba	Chad	Georgia	Jersey	Moldova	Romania	Togo	
Australia	Chile	Germany	Jordan	Monaco	Russian Federation***	Tonga	
Austria	China	Ghana	Kazakhstan	Mongolia	Rwanda	Trinidad and Tobago	
Azerbaijan	Colombia	Gibraltar	Kenya	Montenegro	Saint Lucia	Tunisia	
Bahamas	Congo	Greece	Korea, Republic of	Morocco	Saint Vincent and the Grenadines	Turkey*	
Bahrain	Congo, The Democratic Republic of	Greenland	Kuwait	Mozambique	Samoa	Turkmenistan*	
Bangladesh	Costa Rica	Grenada	Kyrgyzstan	Myanmar	San Marino	Turks and Caicos Island	
Barbados	Croatia	Guadeloupe	Lao	Namibia	Saudi Arabia*	UAE	
Belarus	Cyprus	Guam (including Northern Mariana Islands*)	Latvia	Nepal	Senegal	Uganda	
Belgium	Czech Republic	Guatemala	Lebanon	Netherlands	Serbia	United States	
Belize	Denmark	Guernsey	Lesotho	New Zealand	Seychelles	UK	
Benin	Dominica	Guinea	Liberia	Nicaragua	Sierra Leone	Ukraine***	
Bermuda	Dominican Republic	Haiti	Liechtenstein	Niger	Singapore	Uruguay	
Bhutan	Ecuador	Honduras	Lithuania	Nigeria	Slovakia	Uzbekistan	
Bolivia	Egypt*	Hong Kong	Luxembourg	Norway	Slovenia	Vanuatu	



# Service Descriptions



## Data Portal

Branding Services	Customized web portal experience, add company logo, brand color and map view options
DM1 Faults	Detect, whitelist, store and notify upon receiving real time diagnostics messages (DM1) from the machine
Template Service	Define and configure signal groups from the machine, export signals from IQAN telematics groups and import through web portal
Multi Tier - Account Management	Define multi-tier level organizations and user security access, move machines between hierarchical organizations
Real Time Condition Monitoring	Customize machine signal views and monitor signals near real time



## Reporting

Asset Dashboards	Monitor machine condition with customizable signal grouping, flexible real time asset signal dashboards
Fuel/Hours Report	Fleet level dashboard including time trends, fuel usage and engine hours, top fuel users and idle, top fuel rate performance
Fuel Usage Trends	Fuel usage time trends, compare assets and organizations with most fuel consumption
Engine Hours Trends	Engine hours time trends, compare assets and organizations with most fuel consumption
Cooling System Trends	Cooling temperature and cooling level average trends, compare assets and organizations cooling performance
DEF Level Trends	DEF level average trends, compare assets and organizations DEF Level performance
Lift and Weight Trends	Lift event counts and total loaded weight time trends, compare assets and organizations lifting performance
Impact Events	Monitor Impact event counts, impact magnitude trends, most impacted assets, time and location of impact
CSV/Excel Extract	Export machine signals to CSV or Excel format for further analysis



## OTA Operations

Remote Diagnostics	Deep integration with IQAN tools for real time access: Design – for programming; Run – for service & tuning; Measure – for diagnostics
Controller Software OTA updates	Keep on-board programs current via OTA updates with IQAN real time access
Wi-Fi (AP) - IQAN Diagnostics	Connect mobile devices (PC, phone, tablet) to gateway access point, perform IQAN real time diagnostic and software OTA updates
Wi-Fi (AP) - Mule	Connect PC to gateway access point , extract machine logs and upload the cloud when offline
Wi-Fi Client	Setup gateway as a client and connect to existing infrastructure access points



## APIs

APIs	Access and call fleet level machine data to ingest into your enterprise system
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# Parker Mobile IoT – Service Plan Options

Parker IoT Service		Description	Parker Mobile IoT - Basic	Parker Mobile IoT Standard			Parker Mobile IoT Premium		
Service Options									
Service Plans and Connectivity Options	Service contract period		1YR	1YR	2YR	3YR	1YR	2YR	3YR
	Americas: 4G LTE B2, B4,B5,B12/ 3G UMTS B1, B2, B5, B8		166032	167792	167791	167793	166033	166034	166035
	Europe/International: 4G LTE B3, B7, B20		167998	167999	168000	168001	167990	167991	167992
Service Renewal	Service 1-year renewal		IOT166032_OTA1YR	IOT10680061YR			IOT10680021YR		
Data Plan	Megabytes (MB) per machine per month		25MB	25MB Approx. 15 signals every hour			200MB (Pooling > 100) Approx. 600+ signals every hour		
Overage	Data Overage charges		Applies	Applies			Applies		
IQAN Connections	Integration with IQAN tools for real-time remote diagnostics and software OTA updates		✓ (see price sheet for details)	✓ (see price sheet for details)			✓		
Wi-Fi (AP) IQAN Diagnostics	Connect mobile devices to gateway access point , perform IQAN real time diagnostic and software OTA updates		✓	-			✓		
Wi-Fi (AP) Mule	Connect PC to gateway access point, download machine data and upload to the cloud when offline		-	-			✓		
Wi-Fi Client	Setup gateway as a client and connect to existing infrastructure access points		-	-			✓		
Parker IoT	Integration of machine data with Parker Mobile IoT Cloud & Web Portal		-	✓			✓		
Reporting	Asset dashboard, fleet and machine historical reports, signal export		-	2 Reports (Fleet)			12+ Reports (Fleet, Operation, Health, Lifts)		
Hardware Options									
Parker Gateway	IP67 mobile harden hardware with 4G LTE Cat1 cellular connectivity , 8 GB Data logging memory, 2 CAN port – J1939 and CAN Open capable		-	Group A Group B			Group A Group B		
Combi Antenna	External Wi-Fi, Cellular, and GPS antenna		167019 – 10 ft 167021 – 20 ft	167019 – 10 ft 167021 – 20 ft			167019 – 10 ft 167021 – 20 ft		
GPS on CAN	CAN-based GPS Signal from gateway		-	✓			✓		
Impact Detection	Impact Detection 3 year service, includes UTS-ID Impact Sensor, web portal impact monitoring, alerts and reports		-	167427 – 3YR Impact			167427 – 3YR Impact		