

Compare Cellular Bearer Services for IoT

Talk to one of our experts on **0330 056 3300** or [email](#) for advice on your IoT connectivity needs



	LoRa	NB-IoT <small>(LTE Cat-NB1/2)</small>	LTE-M <small>(LTE Cat-M)</small>	4G <small>(LTE Cat-1 BIS)</small>	4G <small>(LTE Cat-1)</small>	High Performance 4G <small>(LTE Cat-4/6)</small>	5G <small>(LTE Cat-16)</small>
Global Standards Based	✗	✓	✓	✓	✓	✓	✓
Major MNO Support	✗	✓	✓	✓	✓	✓	✓
Typical Connection Speed <small>(Up/Down)</small>	Up to 0.05Mbps	0.07Mbps/0.03 Mbps	Up to 1 Mbps	10Mbps/5Mbps	10Mbps/5Mbps	100Mbps/50Mbps	Up to 1Gbps/120Mbps
Number of Antennas	1	1	1	1	2	2	2
Deployment Scenarios	Stationary <small>(good for indoor and underground)</small>	Stationary <small>(good for indoor and underground)</small>	Mobile/Stationary <small>(good for indoor and underground)</small>	Mobile/Stationary	Mobile/Stationary	Mobile/Stationary	Mobile/Stationary
International Availability & Roaming	n/a	Limited	Limited	✓	✓	✓	✓
Data transfer frequency	Intermittent	Intermittent	Frequent	Frequent	Frequent	Always On	Always On
Response Time <small>(Latency)</small>	Medium	Slow (~1 sec)	Medium (~100ms)	Fast (40ms)	Fast (40ms)	Fast (40ms)	Ultra Fast (~1ms)
Mobility	✗	Handover between cells not supported	✓	✓	✓	✓	✓
Total Cost of Ownership	Deployment Specific - <small>(might have to deploy and manage gateways)</small>	Deployment Specific - <small>(low for local, medium for international)</small>	Deployment Specific - <small>(low for local, medium for international)</small>	Low	Low-Medium	Medium	Medium
Power Source	Battery, Solar	Battery, Solar	Battery, Solar	Battery, Rechargeable Battery or Mains	Battery, Rechargeable Battery or Mains	Mains	Mains
Battery Life <small>(not rechargeable)</small>	5-10 years battery life	5-10 years battery life	5-10 years battery life	up to 5 years	up to 3 years	1 year	<1 year
Power Saving Mode (PSM)	✓	✓ <small>although not always available when roaming</small>	✓ <small>although not always available when roaming</small>	✗	✗	✗	✗
Extended Sleep Cycle (eDRX)	✗	✓ <small>although not always available when roaming</small>	✓ <small>although not always available when roaming</small>	✗	✗	✗	✗
SMS	✗	✗	✓	✓	✓	✓	✓
Two-way Voice	✗	✗	✓	✓	✓	✓	✓
eSIM (eUICC) Compatible	n/a	Not Standard	✓ <small>although not in sleep mode</small>	✓	✓	✓	✓