

RELIABLE DATA STARTS WITH A RELIABLE RF PATH.

RF CONNECTIVITY FOR MODERN WATER INFRASTRUCTURE

RF Antennas.
Engineered Around Your
Application.

THE ANTENNA IS THE LAST PHYSICAL LINK BETWEEN THE ASSET AND THE NETWORK.

Water networks depend on dependable data from meters, pressure and flow sensors, leak detection, pumping stations, reservoirs and wastewater assets. Bloomice engineers the antenna, mounting method, cable and connector around the real installation -from difficult below-ground chambers to exposed remote sites and control-system gateways.

THE MODEM IS ONLY HALF THE STORY

Coverage on a map does not guarantee a dependable link from a wet chamber, metal cabinet or remote pumping asset. The installed antenna position and the complete RF path determine how much network performance is actually realised.



BELOW-GROUND CHAMBERS & BOUNDARY BOXES



REMOTE TELEMETRY & ABOVE-GROUND ASSETS

01 SIGNAL ESCAPE

Depth, chamber geometry, reinforced materials, steel covers and wet surfaces can attenuate or reshape the signal before it reaches the network.

02 PLACEMENT AND DETUNING

Nearby metalwork, pipework, batteries, electronics and coiled cable can change antenna behaviour. A good antenna in the wrong position can still perform badly.

03 BATTERY AND DATA CONTINUITY

A marginal link drives repeated transmission attempts, incomplete records and higher energy use - exactly what a long-life remote device is designed to avoid.

04 AVOIDABLE FIELD COST

Intermittent communications create repeat visits, resets and uncertainty. Engineering the RF path before rollout reduces troubleshooting after installation.

TYPICAL CONNECTED WATER APPLICATIONS

NETWORK MONITORING

Pressure / flow / leakage

SMART METERING

Boundary boxes / AMI / AMR

PUMPING & TREATMENT

SCADA / alarms / control

RESERVOIRS & STORAGE

Level / quality / telemetry

WASTEWATER ASSETS

Sewers / CSO / flood monitoring

SECURITY & RESILIENCE

CCTV / access / failover

FROM CHAMBER TO CONTROL ROOM

THE RIGHT ANTENNA FOR THE ASSET

Six representative Bloomice products cover below-ground chambers, exposed telemetry sites and higher-capacity gateway applications. Final selection is always confirmed against the asset and installation.



01 MARCO POLO LTE

BEST FIT Larger chambers and remote meters

FORMAT & CAPABILITY

700-2655 MHz / omni / ground-plane independent / IP67 / IK09

A broad, robust chamber format with flexible cable, connector and mounting options.



02 NANO LTE

BEST FIT Boundary boxes and compact chambers

FORMAT & CAPABILITY

700-2655 MHz / 360-degree coverage / ground-plane independent / IP67 / IK09

Compact housing for crowded installations around batteries, sensors and pipework.



03 LD 5G / LTE

BEST FIT Space-limited LTE and 5G installations

FORMAT & CAPABILITY

700-2655 & 3300-4000 MHz / 122 x 57 mm / ground-plane independent

A compact option when 4G LTE and sub-6 GHz 5G coverage are both required.



04 SETA LP LTE-5G

BEST FIT Exposed cabinets and telemetry enclosures

FORMAT & CAPABILITY

600-3800 MHz / IP68 / impact-resistant / low-profile omni

A discreet, durable choice where weather exposure, washdown and physical impact matter.



05 PARED-J-NF/5G

BEST FIT Reservoirs, pump stations and fixed telemetry

FORMAT & CAPABILITY

2G / 3G / LTE / 5G NR / medium gain / wall or pole

Permanent outdoor coverage for gateways and remote water infrastructure.



06 MIMO-PLUS 5G NR / LTE

BEST FIT Gateways, CCTV and control systems

FORMAT & CAPABILITY

2G / 3G / LTE / 5G NR / MIMO / IP66 / wall or pole

MIMO capability for fixed applications needing stronger throughput and link resilience.



FROM CHAMBER TO CONTROL ROOM

ENGINEER THE INSTALLED RF PATH

Selecting the product is only the start. Chamber position, mounting, cable loss, connector sealing and final validation determine whether reliable data reaches the control room.

FIVE QUESTIONS BEFORE AN ANTENNA IS SPECIFIED

01 NETWORK?

Radio technology, operator, frequency bands and future migration.

02 CHAMBER / ASSET?

Depth, cover, enclosure material, clear space and fixing points.

03 ENVIRONMENT?

Water, immersion risk, metalwork, UV, temperature and washdown.

04 RF PATH?

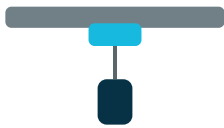
Cable type and length, connector, routing, sealing and strain relief.

05 VALIDATION?

Installed-state testing on the real asset before wider rollout.

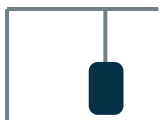
FLEXIBLE MOUNTING FOR DIFFICULT CHAMBERS

MARCO POLO, NANO and LD can all be mounted below ground. Depending on the chamber and cover, the antenna can be fixed to a bracket or suspended from a steel manhole cover using a high-strength neodymium magnet.



MAGNET SUSPENDED

A short chain suspends the antenna beneath a steel cover. The strong, removable fixing avoids drilling the cover.



BRACKET MOUNTED

A defined position and controlled cable route where the cover is non-magnetic or chamber space is constrained.



FIELD INSTALLATION

Depth, cover, cable route and equipment position all matter.

BRING BLOOMICE THE ASSET, THE RADIO AND THE ENVIRONMENT.

We will help define the antenna, mounting, cable, connector and validation route around the application.

