



THE RANGE OF POLYETHYLENE BUOYS



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BENEFITS

Less Maintenance

Lower Weight

Modular

Environnement-Friendly

--- ● LESS MAINTENANCE

Plastic parts do not corrode

--- ● LOWER WEIGHT

Less logistical and lifting resources

Smaller servicing vessels

--- ● MODULAR

Less spare buoys

Easy transportation and storage

Easy to repair

--- ● ENVIRONNEMENT-FRIENDLY

Polyethylene is fully recyclable

No anti-fouling coating

Longer service intervals



DESIGN PRINCIPALS

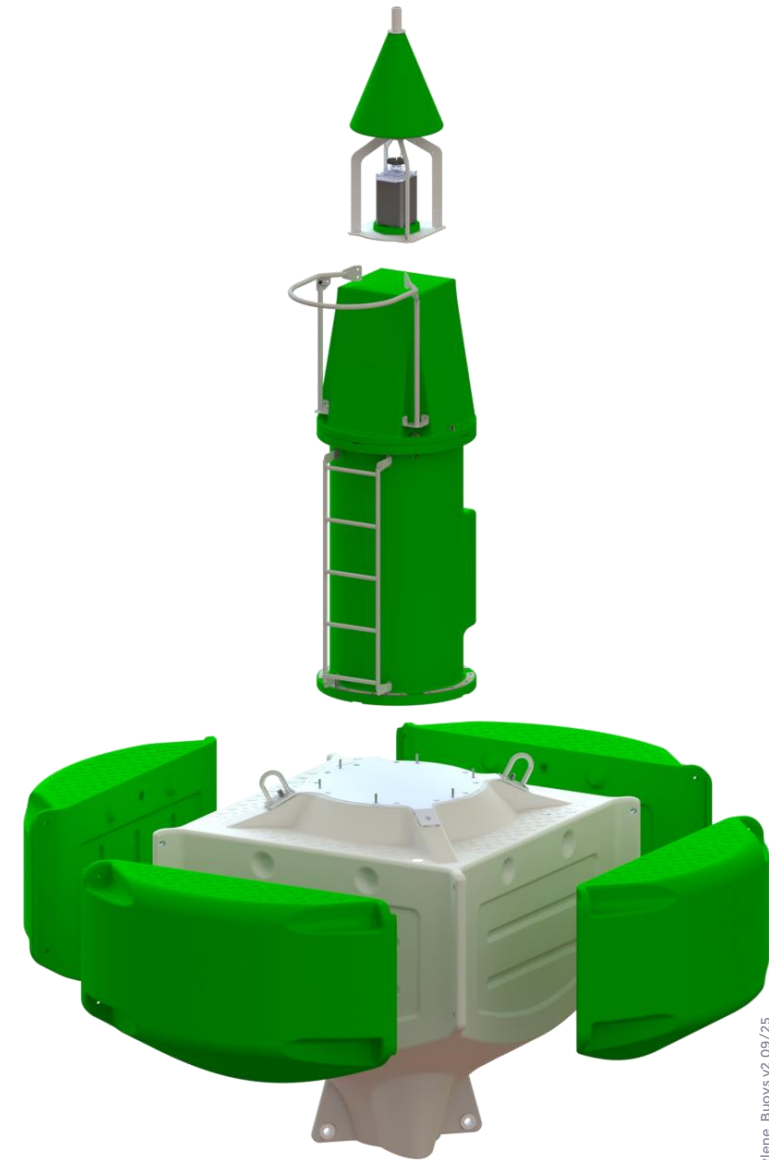
Floats and Spars Structures

— ● FLOATS AND SPARS

- Rotational moulded thermoplastic parts
- Precompounded virgin Polyethylene (PE)
- UV stabilisation and high quality pigments
- Colour matching according to IALA requirements
- Optional closed cell expanded Polystyrene (EPS) foaming
- Mechanical and waterproof tests

— ● STRUCTURES

- Mechanical strength calculation using a calculation tool (FEM)
- CAD design
- Mechanical testing
- Approved corrosion protection systems
- Reinforced lifting and mooring devices



DESIGN PRINCIPALS

Option
Tailor-Made equipment
Mooring-Lines and Anchoring

— ● OPTION, TAILOR MADE EQUIPMENT

GISMAN's solar lanterns with connectivity modules, AIS, radar reflectors, solar generators
Elevated focal plane, high visibility day marks, retro-reflective stripes, marking/identification plates
Secure access, anti-slip decking,
Anti-vandalism system, anti-volatile systems
Integration of Hydro Weather sensors
Storage ber, standalone tail tubes

— ● MOORING-LINES AND ANCHORING

Stability and buoyancy according to IALA G1099
Mooring-lines and anchoring according to IALA G1066
Single or multiple mooring systems
Textile, hybrid and chain mooring lines
Environment-friendly mooring lines
Dampers
Sinkers, anchoring systems



POLYETHYLENE RANGE OF BUOYS

Proximity and River Buoys

Coastal Buoys

Open Sea buoys

● PROXIMITY AND RIVER BUOYS



● COASTAL BUOYS

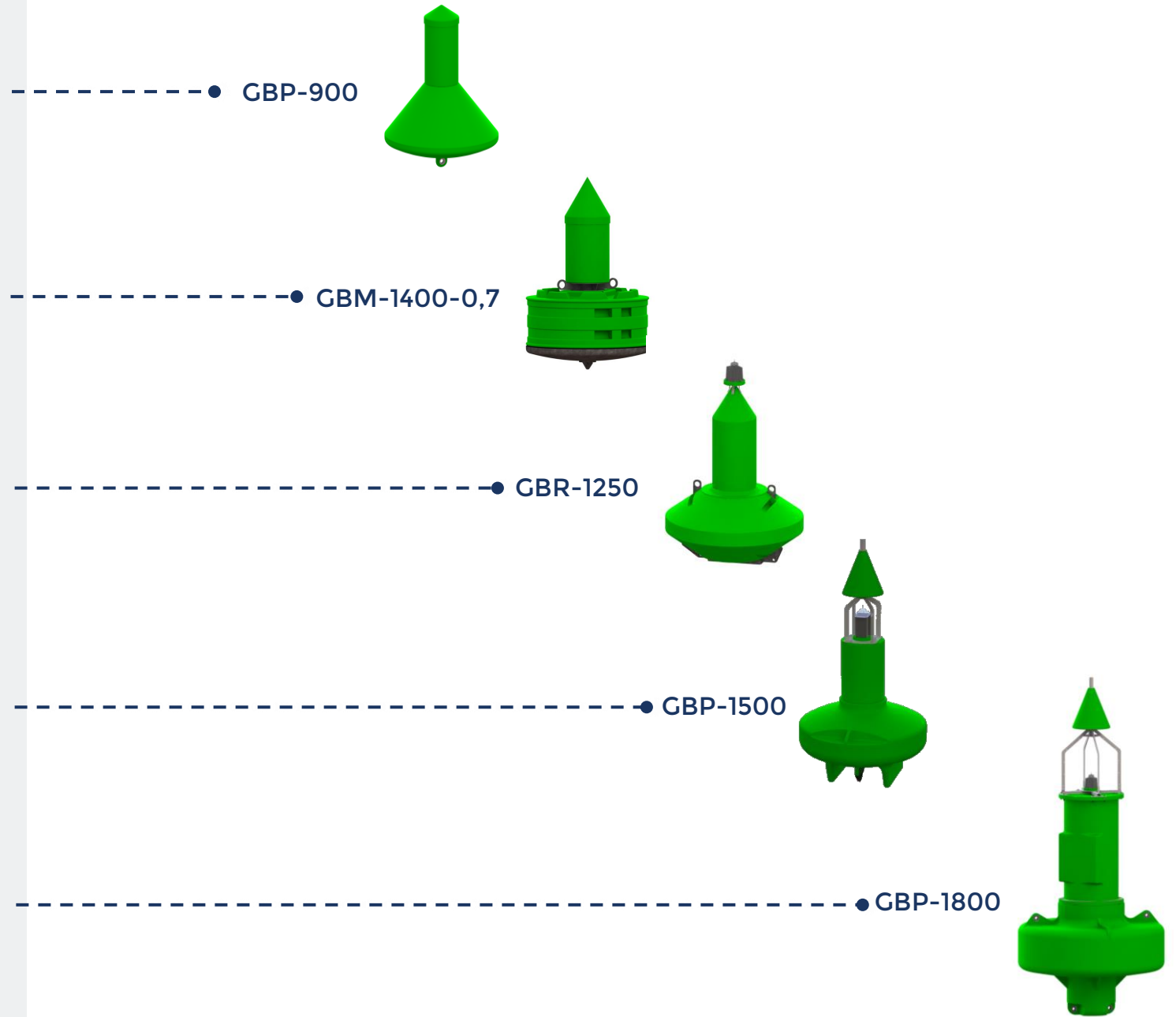


● OPEN SEA BUOYS



PROXIMITY AND RIVER BUOYS

Lightweight
Economic



GBP-900

Proximity

LIGHTWEIGHT AND VISIBLE

| | |
|---------------------|---------------------------------|
| Float diameter | 0.9 m |
| Float volume | 200 L |
| Type of float | Monobloc (optional EPS foaming) |
| Reserve buoyancy | 0.18 m ³ |
| Focal plane | Up to 1.3 m |
| Total weight | 19 kg |
| Recommended chain | DN14-5D |
| Recommended lantern | GISMAN GSC-3 |



GBR-1250

River

SUITABLE FOR FAST CURRENT

| | |
|---------------------|--------------------------------------|
| Float diameter | 1.25 m |
| Float volume | 0.4 m ³ |
| Type of float | 2 segments (optional EPS foaming) |
| Reserve buoyancy | 0.3 m ³ |
| Focal plane | 1.5 m (0,75 spar) to 1.9 m (1 spar) |
| Total weight | 70 kg to 110 kg |
| Recommended chain | DN14-5D |
| Recommended lantern | GISMAN GSC-3 |



GBM-1400-0,7

Ports & Harbours

MODULAR AND FLAT BOTTOM

| | |
|---------------------|-----------------------------------|
| Float diameter | 1.4 m |
| Float volume | 0.7 m ³ |
| Type of float | 2 segments (optional EPS foaming) |
| Reserve buoyancy | 0.45 m ³ |
| Focal plane | 1.5 m (Spar 0,75) |
| Total weight | 235 kg or 245kg |
| Recommended chain | DN16-5D |
| Recommended lantern | GISMAN GSC-3 |



GBP-1500

Fast current

MULTI-PURPOSE

| | |
|----------------------|--------------------------------------|
| Float diameter | 1.5 m |
| Float volume | 0.8 m ³ |
| Type of float | Monobloc with EPS foaming |
| Reserve buoyancy | 0.6 m ³ |
| Focal plane | 1.4 m (0,75 spar) or 2.1 m (1 spar) |
| Total weight | 167 kg or 180 kg |
| Recommended chain | DN16-5D |
| Recommended lanterns | GISMAN GSC-3 / GSC-5-SS |



GBP-1800

Ports & Harbours

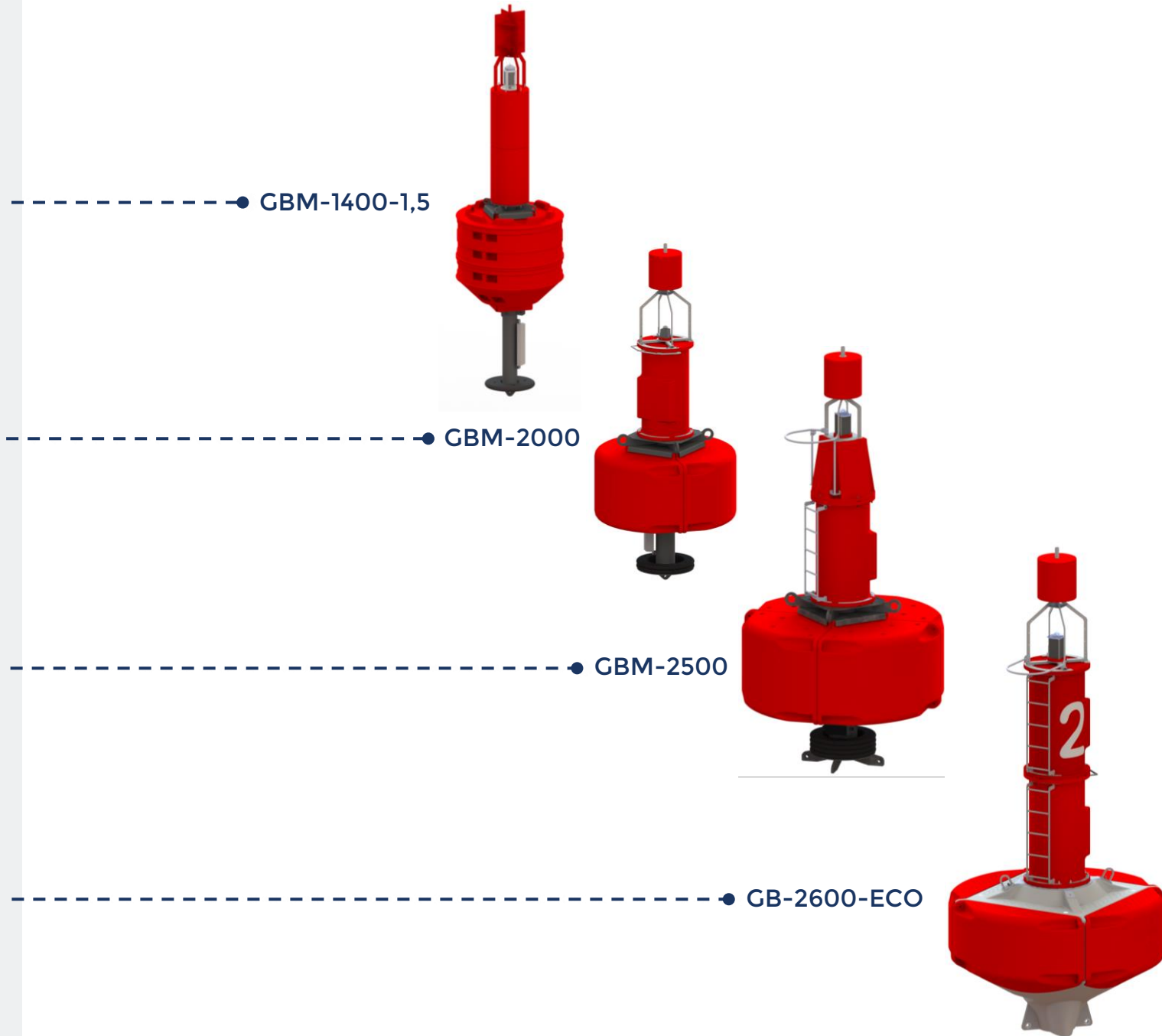
PROXIMITY MARKER BUOY

| | |
|----------------------|---------------------------|
| Float diameter | 1.8 m |
| Float volume | 1.7 m ³ |
| Type of float | Monobloc with EPS foaming |
| Reserve buoyancy | 1.3 m ³ |
| Focal plane | 2.5 m |
| Total weight | 403 kg |
| Recommended chain | DN25-5D with bridle |
| Recommended lanterns | GISMAN GSC-3 / GSC-5 |



COASTAL BUOYS

Multipurpose
High Visibility



GBM-1400-1,5

Semi-exposed

HYBRID AND STABILITY

| | |
|----------------------|-----------------------------|
| Float diameter | 1.4 m |
| Float volume | 1.5 m ³ |
| Type of float | 4 segments with EPS foaming |
| Reserve buoyancy | 1.0 m ³ |
| Focal plane | 2.5m |
| Total weight | 480 kg |
| Recommended chain | DN25-5D |
| Recommended lanterns | GISMAN GSC-3 / GSC-5 |



GBM-2000

Semi-exposed

STRONG AND MODULAR

| | |
|----------------------|-----------------------------|
| Float diameter | 2.0 m |
| Float volume | 3.1 m ³ |
| Type of float | 2 segments with EPS foaming |
| Reserve buoyancy | 2.0 m ³ |
| Focal plane | 2.5 to 4.2 m |
| Total weight | 780 to 1200 kg |
| Recommended chain | DN25-5D |
| Recommended lanterns | GISMAN GSC-5 / GSC-8 |



GBM-2500

Coastal / Channel

HYBRID AND HIGH VISIBILITY

| | |
|----------------------|-----------------------------|
| Float diameter | 2.5 m |
| Float volume | 5.25 m ³ |
| Type of float | 4 segments with EPS foaming |
| Reserve buoyancy | 3.6 to 4.0 m ³ |
| Focal plane | 3.9 to 5.4 m |
| Total weight | 1200 to 1600 kg |
| Recommended chain | DN30-5D |
| Recommended lanterns | GISMAN GSC-5 / GSC-8 |



GB-2600-ECO

Coastal / Channel

EFFICIENT AND COST-EFFECTIVE

| | |
|----------------------|-----------------------------------------------------------------|
| Float diameter | 2.6 m |
| Float volume | 5.6 m ³ |
| Type of float | PE central structure with EPS foaming + 4 segments of PE floats |
| Reserve buoyancy | 4.6 m ³ |
| Focal plane | 2.6 to 3.9 m |
| Total weight | 900 to 950 kg |
| Recommended chain | DN30-5D |
| Recommended lanterns | GISMAN GSC-5 / GSC-8 |



OPEN SEA BUOYS

Resilient
Modular

GBM-3000-7.5



GBM-3000-10



GBM-3000-12



GBM-3000 - 7.5

Open sea

DURABLE AND HIGHLY VISIBLE

| | |
|----------------------|-----------------------------|
| Float diameter | 3.0 m |
| Float volume | 7.5 m ³ |
| Type of float | 4 segments with EPS foaming |
| Reserve buoyancy | 6 m ³ |
| Focal plane | 4.0 to 5.5 m |
| Total weight | 1400 à 1700 kg |
| Recommended chain | DN35-5D |
| Recommended lanterns | GISMAN GSC-5 / GSC-8 |



GBM-3000 – 10

Open Sea

SIGNIFICANT DEPTHS

| | |
|----------------------|-----------------------------|
| Float diameter | 3.0 m |
| Float volume | 10 m ³ |
| Type of float | 4 segments with EPS foaming |
| Reserve buoyancy | 8 m ³ |
| Focal plane | 4.0 to 6.0 m |
| Total weight | 1700 à 2000 kg |
| Recommended chain | DN35-5D |
| Recommended lanterns | GISMAN GSC-5 / GSC-8 |



GBM-3000 - 12

Open Sea

OFFSHORE

| | |
|----------------------|-----------------------------|
| Float diameter | 3.0 m |
| Float volume | 12 m ³ |
| Type of float | 4 segments with EPS foaming |
| Reserve buoyancy | 10 m ³ |
| Focal plane | 5.0 to 6.2 m |
| Total weight | 1800 à 2100 kg |
| Recommended chain | DN35-5D |
| Recommended lanterns | GISMAN GSC-5 / GSC-8 |



GISMAN, SINCE 1862.

close to 500 customers in 80 countries

1

Implementation of major historic lighthouses and light stations on all continents.

2

Acknowledged as a pioneering designer and manufacturer of modular plastic navigational buoys in the early 1990s.

3

Market introduction of its own range of marine lanterns and applications suite for monitoring and maintenance in 2022.



Quality Management System
approved to standards ISO 9001:2015.



IALA was established in 1957.
GISMAN is member since 1966.



Your contact

Vincent ROGET

Sales Director

+33 (0)2 97 29 41 21

vincent.roget@gisman.fr

