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GISMAN  
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# THE RANGE OF POLYETHYLENE BUOYS



# CONTENT

1

## INTRODUCTION

- BENEFITS
- DESIGN
- RANGE

2

## PROXIMITY BUOYS

- GBP-900
- GBR-1250
- GBM-1400-0.7
- GBP-1500
- GBP-1800

3

## COASTAL BUOYS

- GBM-1400-1.5
- GBM-2000
- GBM-2500
- GB-2600-ECO

4

## OPEN SEA BUOYS

- GBM-3000-7.5
- GBM-3000-10
- GBM-3000-12

# 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 Buoy

Coastal Buoy

Open Sea buoy

● PROXIMITY AND RIVER BUOYS



● COASTAL BUOYS

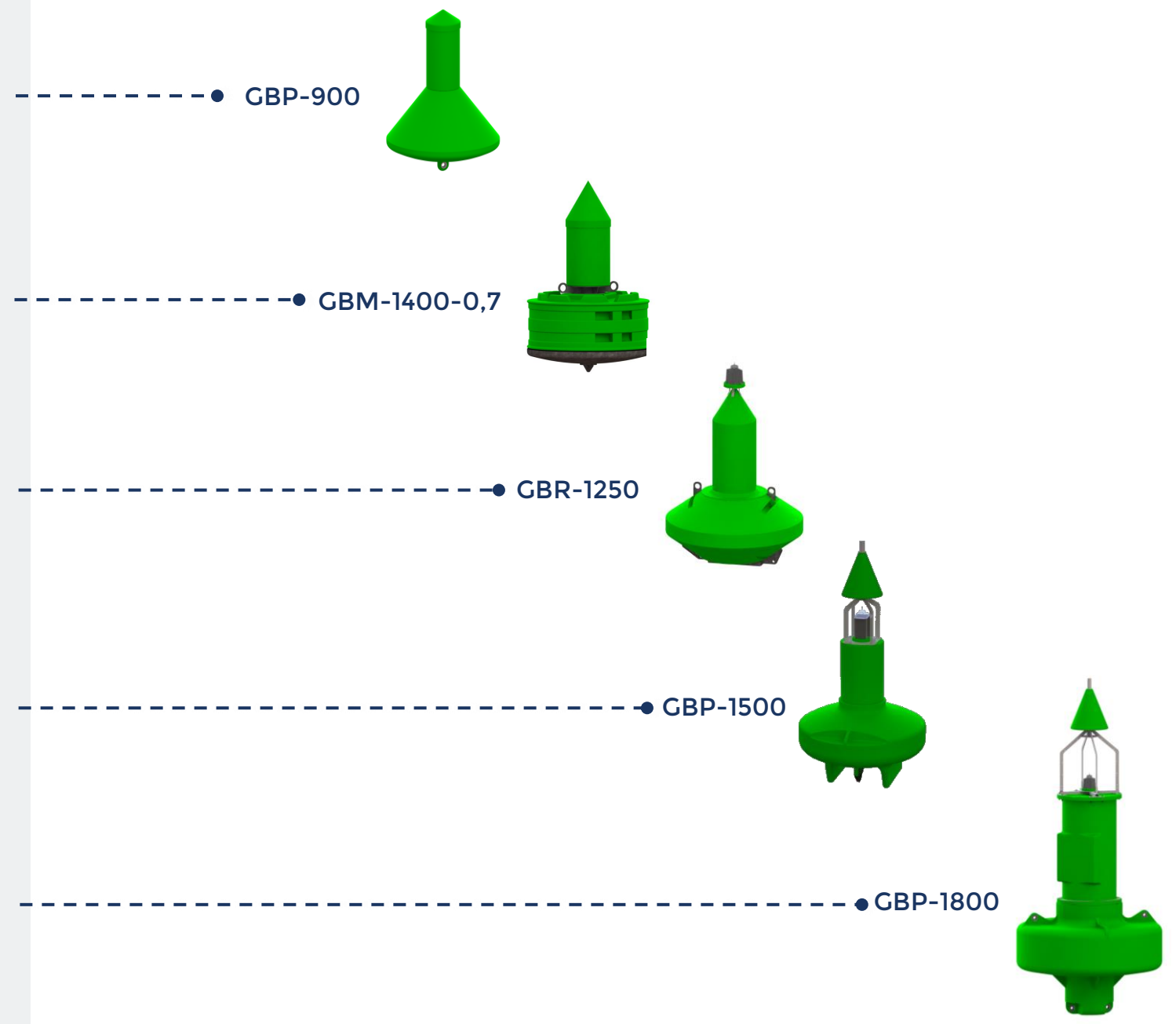


● OPEN SEA BUOYS



# 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 <sup>3</sup>
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 <sup>3</sup>
Type of float	2 segments (optional EPS foaming)
Reserve buoyancy	0.3 m <sup>3</sup>
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 <sup>3</sup>
Type of float	2 segments (optional EPS foaming)
Reserve buoyancy	0.45 m <sup>3</sup>
Focal plane	1.5 m (Spar 0,75)
Total weight	235 kg or 245kg
Recommended chain	DN16-5D
Recommended lantern	GISMAN GSC-3

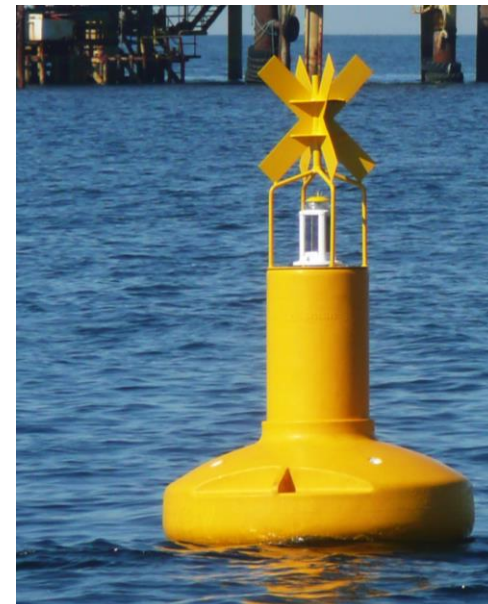


# GBP-1500

Fast current

# MULTI-PURPOSE

Float diameter	1.5 m
Float volume	0.8 m <sup>3</sup>
Type of float	Monobloc with EPS foaming
Reserve buoyancy	0.6 m <sup>3</sup>
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 <sup>3</sup>
Type of float	Monobloc with EPS foaming
Reserve buoyancy	1.3 m <sup>3</sup>
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



● GBM-2000



● GBM-2500



● GB-2600-ECO



# GBM-1400-1,5

Semi-exposed

## HYBRID AND STABILITY

Float diameter	1.4 m
Float volume	1.5 m <sup>3</sup>
Type of float	4 segments with EPS foaming
Reserve buoyancy	1.0 m <sup>3</sup>
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 <sup>3</sup>
Type of float	2 segments with EPS foaming
Reserve buoyancy	2.0 m <sup>3</sup>
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 <sup>3</sup>
Type of float	4 segments with EPS foaming
Reserve buoyancy	3.6 to 4.0 m <sup>3</sup>
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 <sup>3</sup>
Type of float	PE central structure with EPS foaming + 4 segments of PE floats
Reserve buoyancy	4.6 m <sup>3</sup>
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 <sup>3</sup>
Type of float	4 segments with EPS foaming
Reserve buoyancy	6 m <sup>3</sup>
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 <sup>3</sup>
Type of float	4 segments with EPS foaming
Reserve buoyancy	8 m <sup>3</sup>
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 <sup>3</sup>
Type of float	4 segments with EPS foaming
Reserve buoyancy	10 m <sup>3</sup>
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.



ISO 9001

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](mailto:vincent.roget@gisman.fr)**

