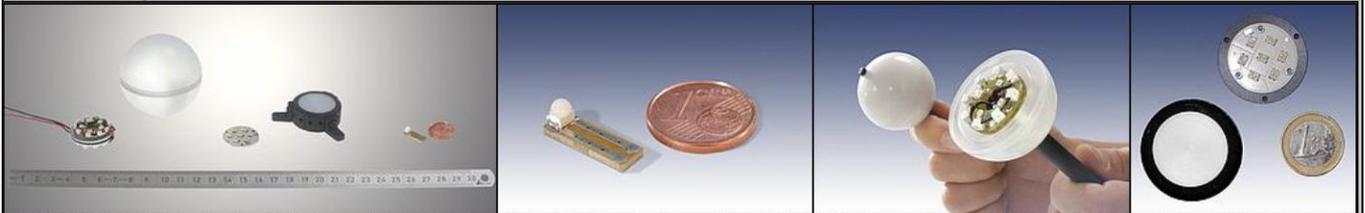


# Passive and active markers

ART provides a variety of different markers and marker types, according to the requirements of each installation.

## Active markers

Active markers are infrared light emitting elements, mostly LEDs. Due to their flexibility, active markers are ideal for custom targets and customized solutions.



Marker type	Visibility	IR Range	Description
Active - single LED	limited +/- 60°	up to 10 m	- electronics and power supply necessary - can be covered with acrylic protection film
Active - single LED - with diffusor sphere	optimum angular range of visibility	up to 4.5 m	- electronics and power supply necessary
Big active - spherical	from all sides	up to 20 m	- electronics and power supply necessary - suitable for outdoor tracking
Big active - flat	angular range of visibility limited +/- 90°	up to 20 m	- electronics and power supply necessary - suitable for outdoor tracking - magnetic base for easy positioning on metal surfaces

## Passive markers

Passive markers are retroreflective, i.e. they reflect the incoming IR radiation into the direction of the incoming light.



Marker type	Visibility	IR Range	Description
Passive - spherical	from all sides	4 – 10 m *	- sensitive surface
Passive - spherical - coated	from all sides	3 – 7 m *	- robust surface
Passive - flat	limited +/- 45°	4 – 10 m *	- cheap - more robust surface possible

\* depending on tracking camera type and marker size