



Mechanics Design

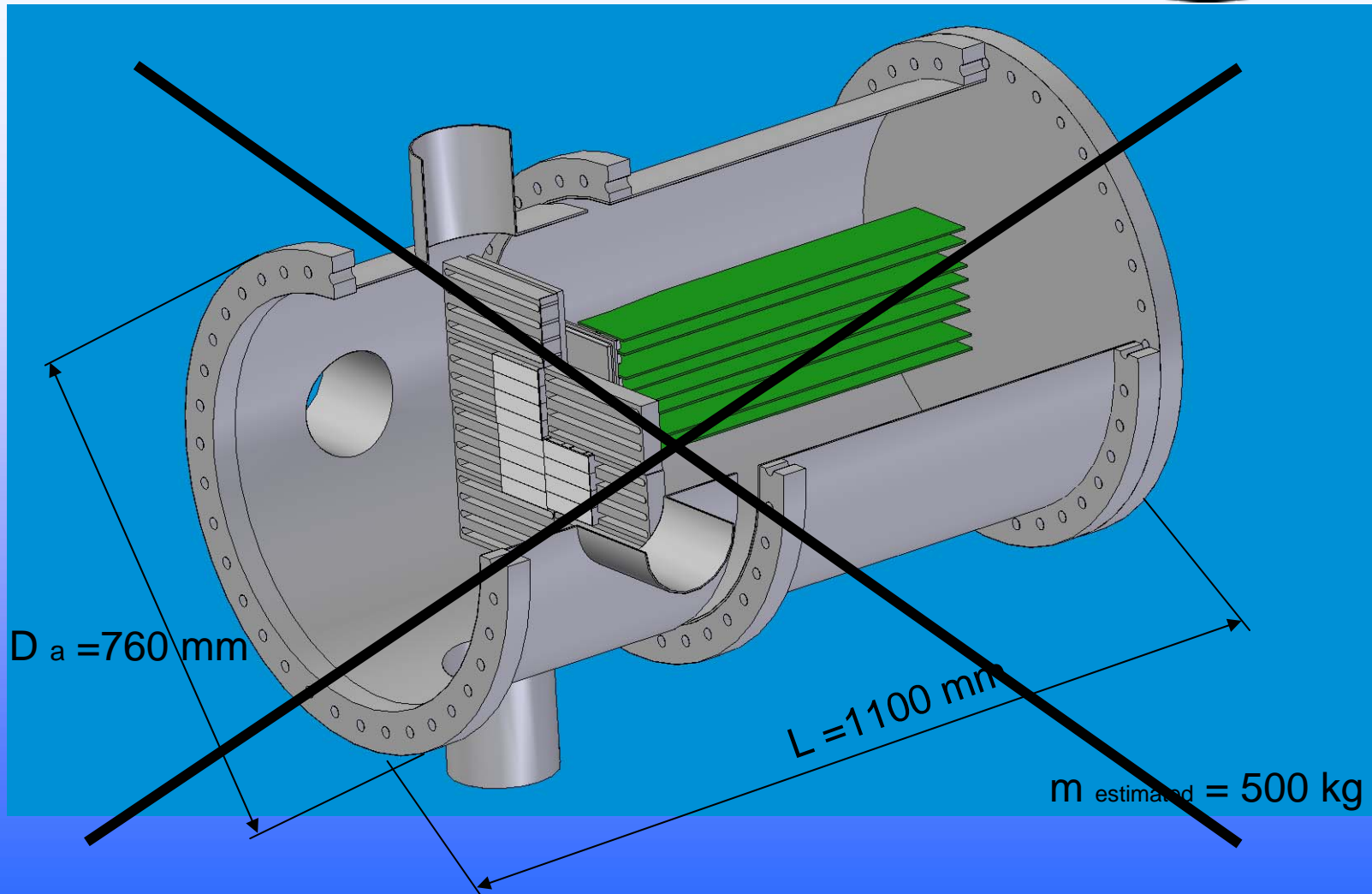


Requirements:

- The mechanics should meet the following requirements:
- Mechanical stability and high precision positioning of the modules.
- Cooling of the chips to -15°C .
- Easy maintenance access and module replacement.
- Operate under ambient pressure or vacuum.
- Support for the front end electronics.



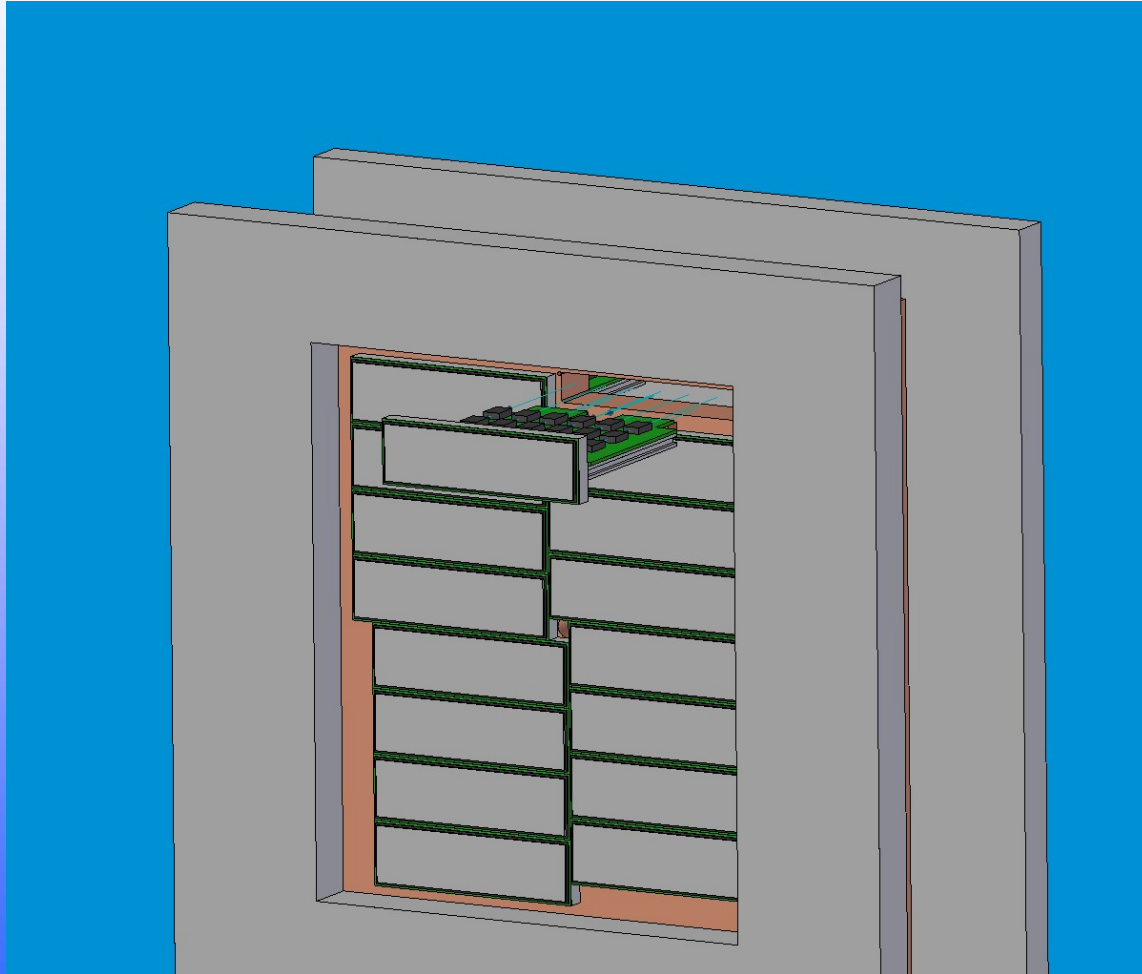
Side cut View
1k x 1k





1k x 1k Sensor

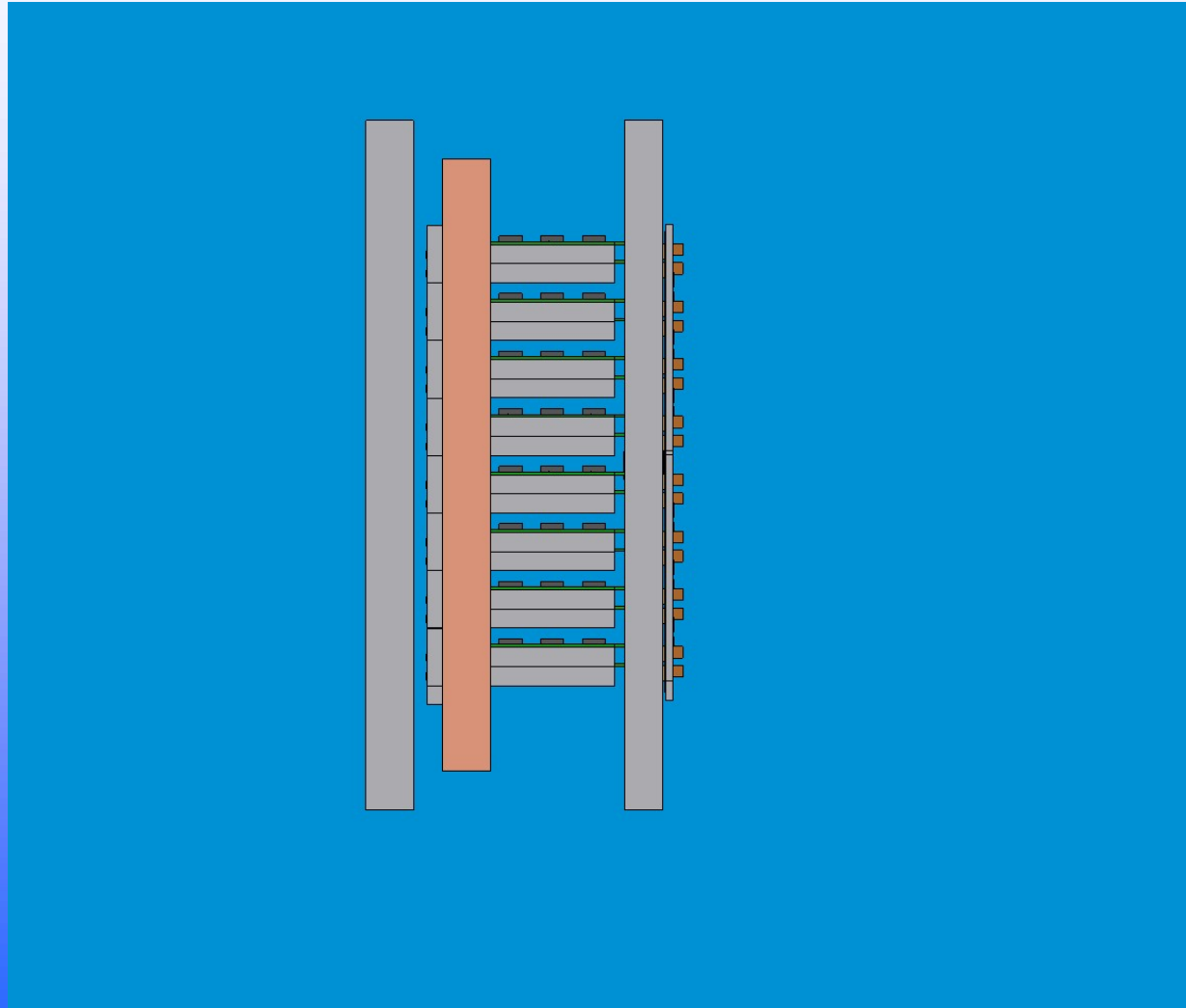
Front View





1k x 1k Sensor

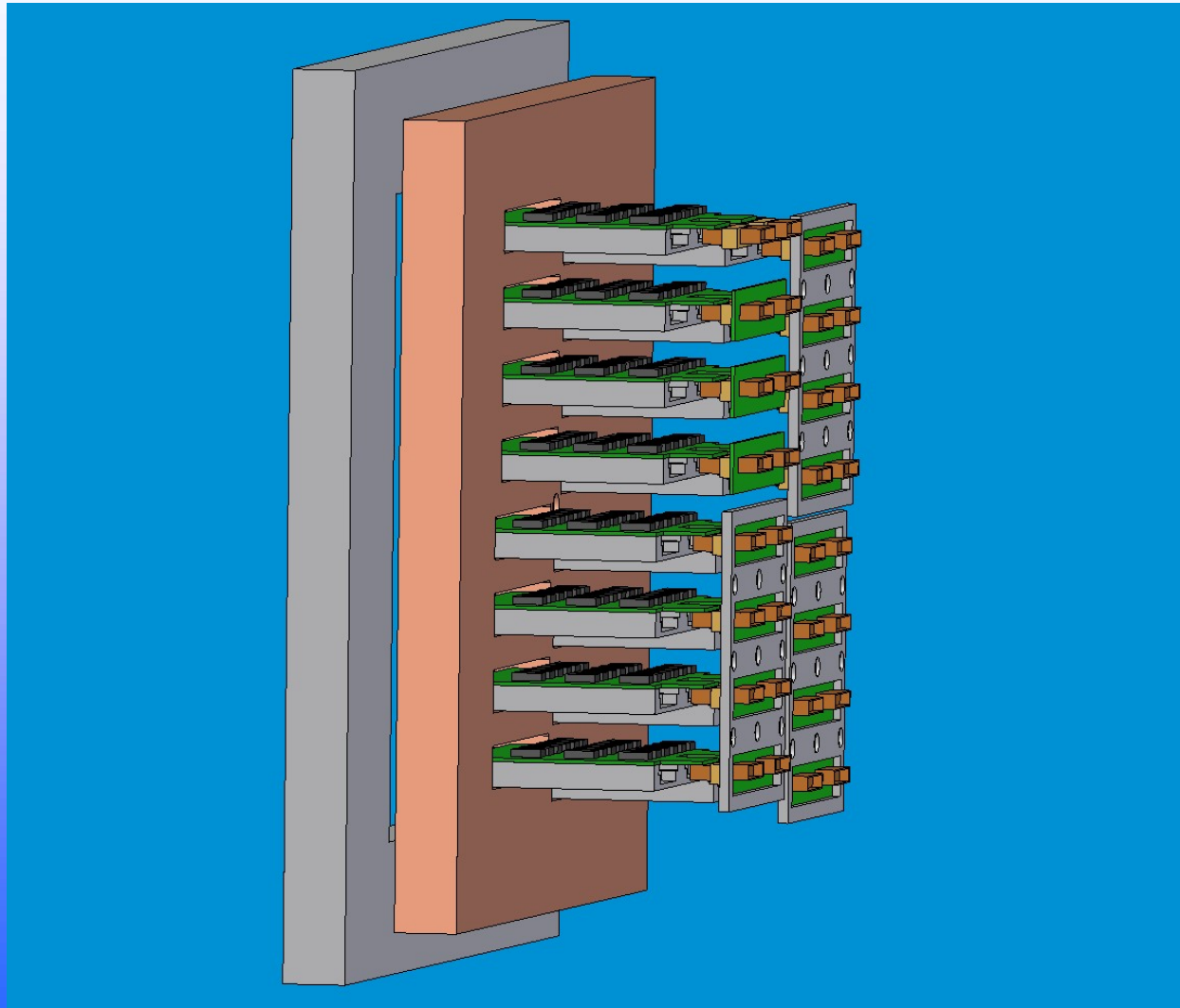
Side View





1k x 1k Sensor

Rear View





AGIPD Bare Module

Chip Parameters:

No. of Pixels 64 x 64
Total Area 12.94 x 13.74

(assuming 800um periphery + 70um die seal ring)

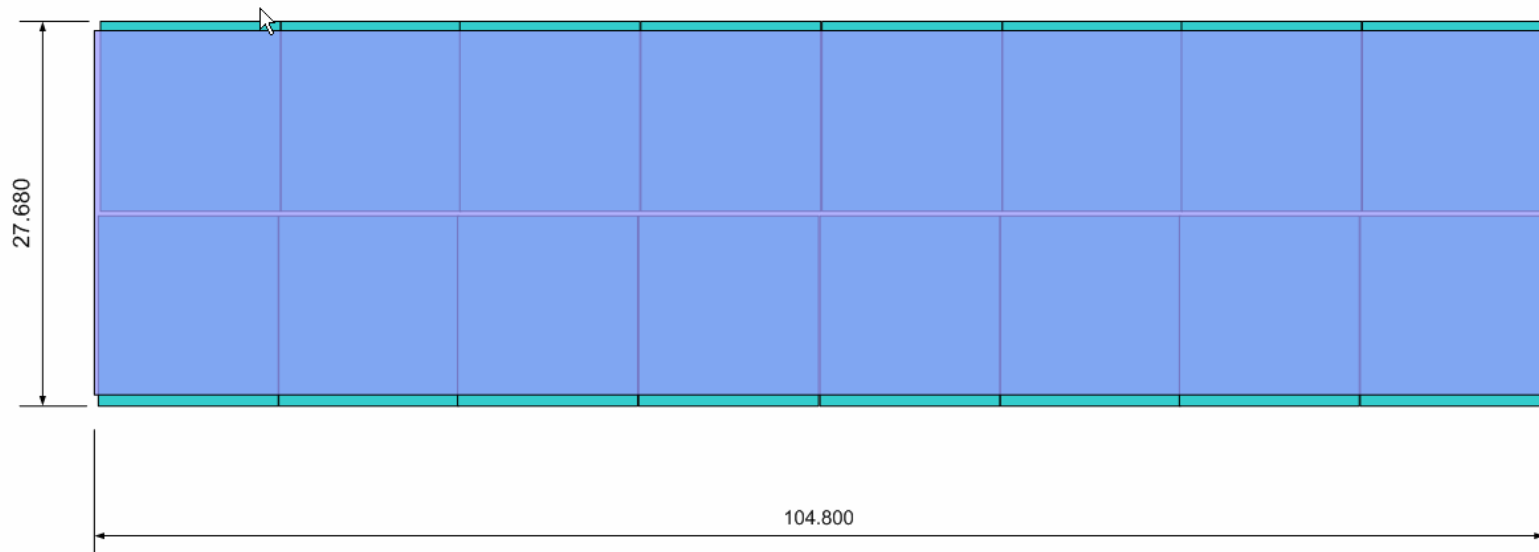
Module Parameters:

No. of Pixels 519 x 129
Active Area 103.800 x 25.800
Total Area (Sensor) 104.800 x 26.800
Baseplate 104.800 x 27.680
HDI 104.870 x 28.680
Support 104.940 x 28.780

(assuming 500um Sensor Guard Ring)

Multi Module Parameters:

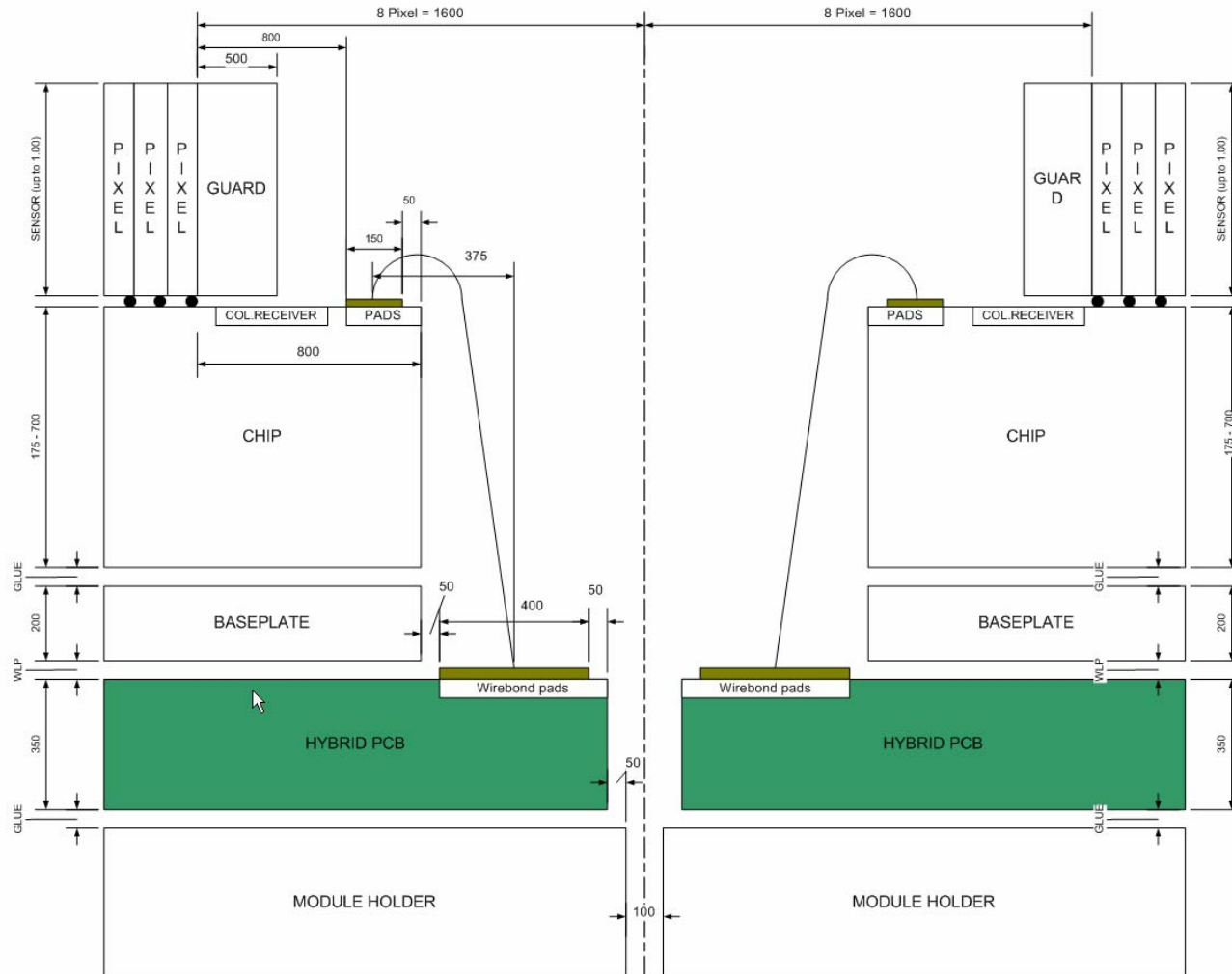
No. of dead Gap Pixels (2x3) x (2x8)
No. of Pixels incl. Gap 525 x 145
Module Step 105.000 x 29.00





Dimensions

Module 2 Module Longside





Dimensions

Module 2 Module Shortside

