





# Status Endcap Disc DIRC

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# **DIRC** components



# The Disc DIRC's heart

four independent quadrants made of fused silica and equipped with a total of 81 read-out modules (ROMs)



# **DIRC** components













glue ROMs piece by piece to radiator

**DIRC optics** will form a rigid unit

















First **ROM** prototypes with two **FLGs**/ **prisms** for the 2015 testbeam.



















assembly of DIRC quadrants with stabilizing cross and mounting frame in horizontal position

bring fully assembled **DIRC** to a vertical position using a custom-built mounting device

slowly move **DIRC** up to the **endcap holding structure** 

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assembly of stabilizing cross frame

bring fully assembled vertical position using a custom-built mounting device

slowly move holding structure

How much space in z-direction is available for a mounting device?

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Gas System





Additional openings in radiator box are foreseen for gas system

Gas tubes will be guided along the stabilizing cross on the outside of the radiator



#### Cabling



System Name	Diameter [mm]	per ROM	per Quadrant	Total area
HV	3	1	27	30.5 cm²
LV	2.5	2	27	42.4 cm <sup>2</sup>
Readout	2.5	2	27	42.4 cm <sup>2</sup>
Gases	15	0.04	2	2.1 cm <sup>2</sup>
Readout Cooling	20	0.04	2	3.7 cm <sup>2</sup>
Laser	2.5	0.04	2	0.1 cm <sup>2</sup>

121.4 cm<sup>2</sup>

#### only preliminary values

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# Cabling





### Summary



- Mechanics still very conceptual recent developments are driven by and tailored to the upcoming test beam.
- Mechanical tests (gluing) are in the pipeline. Further prototyping depends also on BMBF approval.
- Cabling scheme yet preliminary. FEE and readout is being developed and essential for final setup.
- Limited manpower available. Engineer is available only about 10 % of his working time.



