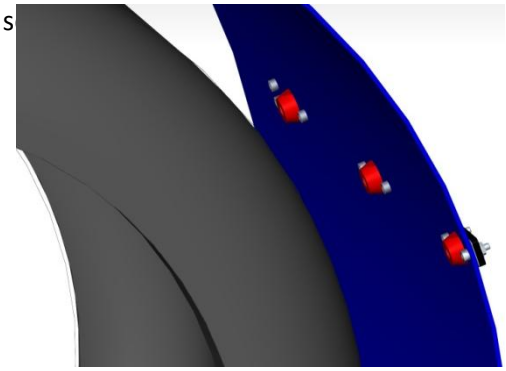
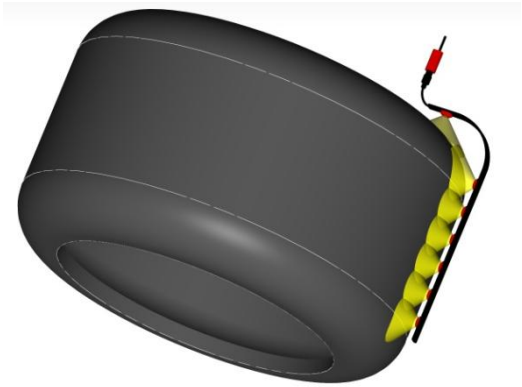
IRN-RC

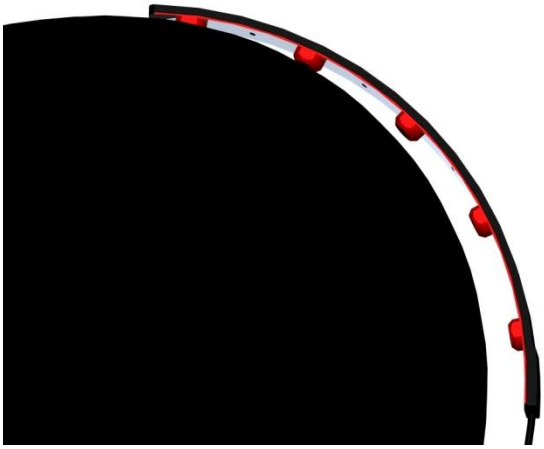
Presentation:

The success of our IRN8, 8ch infrared sensor has shown us our customers interest to measure the whole tyre width temperature distribution. Anyway if we had good experience in single seater where space around the tyre is not a problem, we met difficulties to install IRN8 on closed Car (touring Car, GT, Le Mans..) and this drives us to develop the new concept : IRN-RC

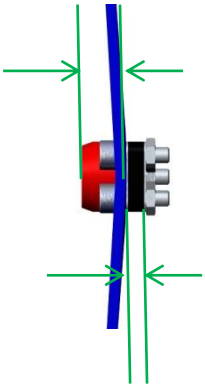
IRN-RC is made of one Master Control Box (MCB) supplying **CAN** data; data collected by a digital bus from **Infrared temperature sensors** (one chanel per sensor). IRN-RC is designed to accept from 3 to 8 s







Slim solution for easy integration:

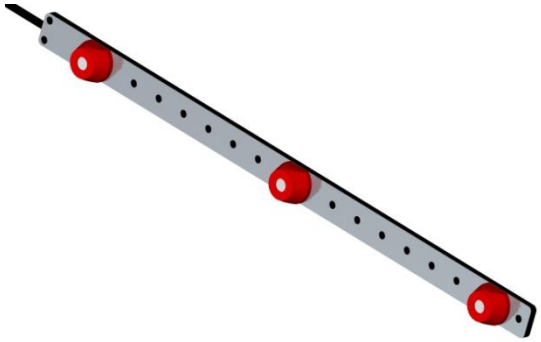


4 mm with 90° FOV cells

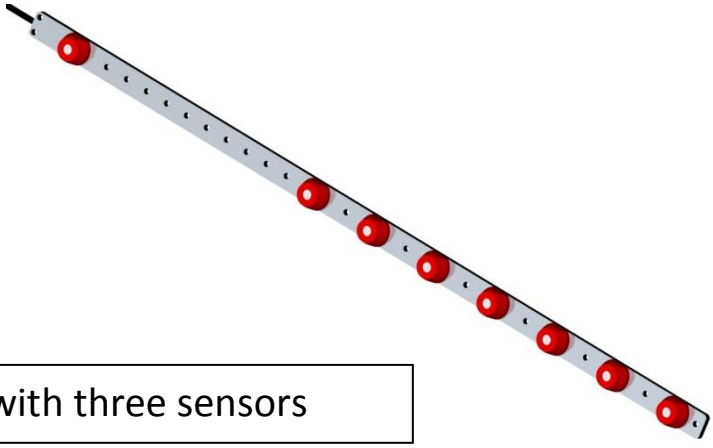
8.5 mm with 45°FOV cells

A lot of configuration are possible :

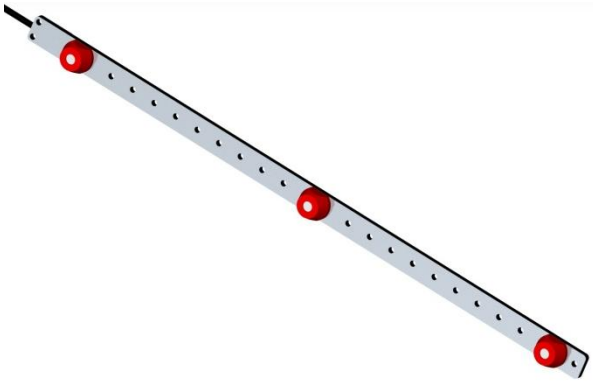
From 3 sensors

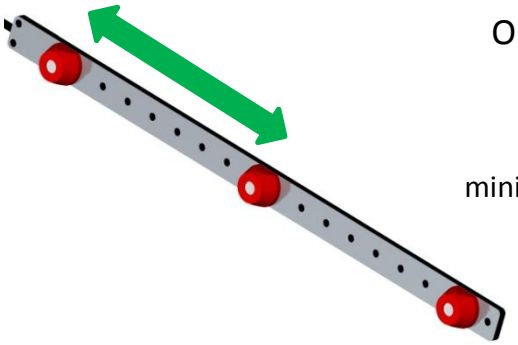


Up to 8 sensors



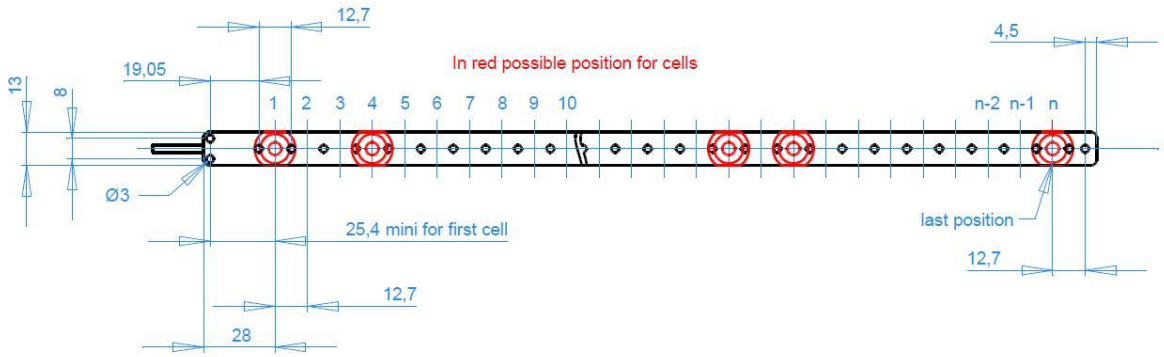
One example of two configuration with three sensors





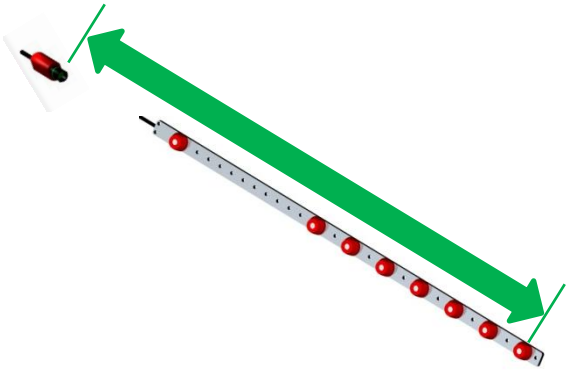
On demand position between sensors (step of 1/2 inch)

minimum distance between sensors : 1 inch



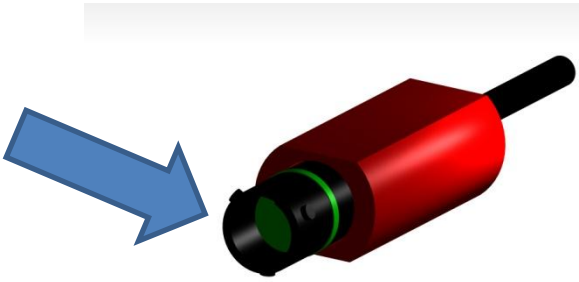
General information : step 1/2 inch (12.7 mm) ; minimal distance between 2 cells : 1 inch (25.4 mm)
"n" should not be greater than 44 ; maximal distance between master and last cell must be less than 600 mm

Maximal distance of cells bus : 600 mm max (from MCB to last sensor)

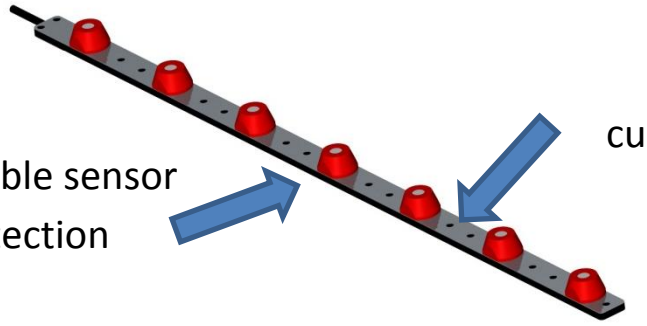


Dimensions of the Master Control Box, without connector (27x13x10 mm)

connector between MCB and sensors strip For a quick change of sensors

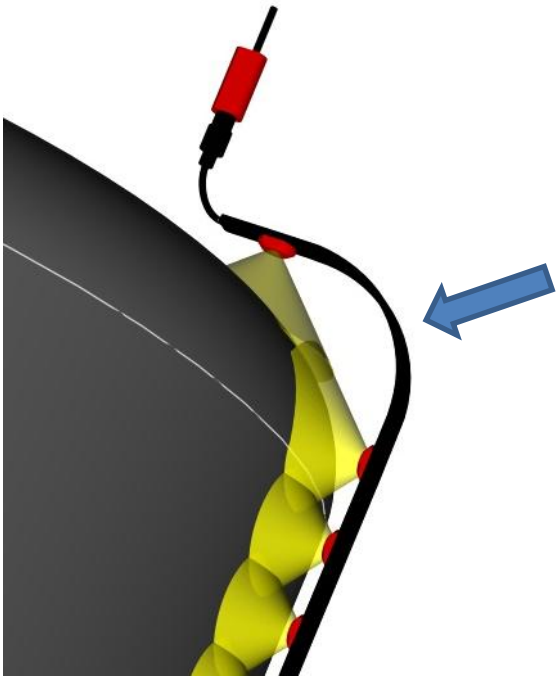


Dimensions of temperature infrared sensor flexible strip (lenght up to 600 x13x4 mm)



Removable sensor protection

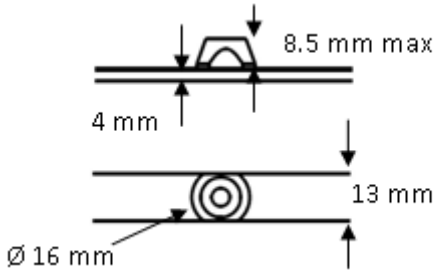
Fixing holes for customer diam 3 mm



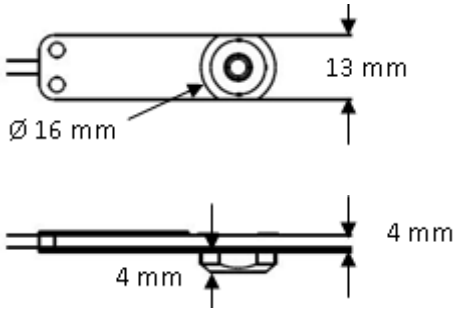
Flexible sensor strip minimum radius between cells : 30 mm

Two Field Of View possible : 90° or 45° for 90% of Infrared signal

Cells dimension for FOV 45°



Cells dimension for FOV 90°



cells angle (°)	45	90
distance (mm)	spot diam (mm)	spot diam (mm)
10	8	20
20	17	40
30	25	60
40	33	80
50	41	100
60	50	120
70	58	140
80	66	160
90	75	180
100	83	200
110	91	220
120	99	240
130	108	260
140	116	280
150	124	300