C-12 Carbon Sensor

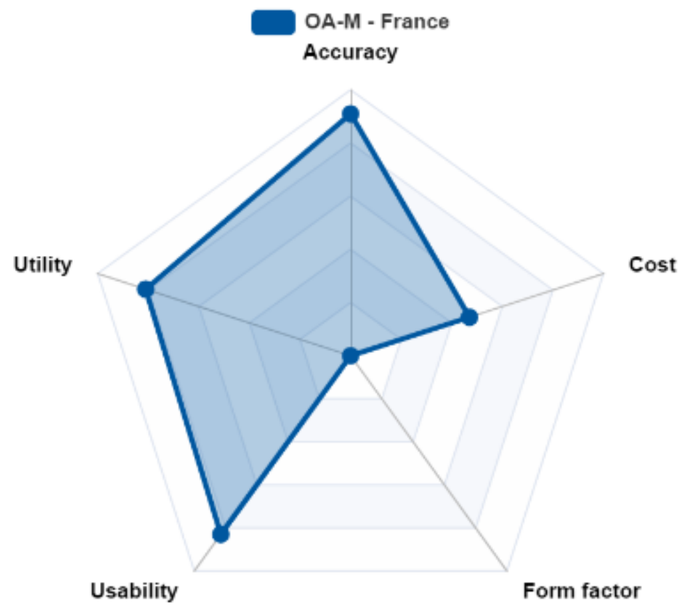
Use for which sensor performance was best: OA-M - France

★★★★☆

Jury's opinion

The C-12 Carbon Sensor from ACOEM is the first Black Carbon sensor system to participate in the Challenge. It obtained an excellent score in accuracy, being comparable with reference analyzers and scores also well on the utility and usability scales. However it is held back by its large size and its cost.

Evaluation



Measured pollutants

- ○ CH_2O
- ○ NO_2 (NO_x)
- ○ CO
- ○ O_3
- ○ CO_2
- ○ PM_1
- ○ VOC
- ○ $PM_{2.5}$
- ○ H_2S
- ○ PM_{10}
- ○ NH_3
- ○ SO_2
- ○ NO
- ○ Particle number (concentration)
- ☑ BC
- ☑ WB

Other measurements

- ☑ Temperature
- ☑ Atmospheric pressure
- ○ Humidity
- ○ Luminosity
- ○ Odours
- ○ Acoustic comfort
- ☑ GPS
- ○ Anemometer

Data storage location: USA

Entreprise/Company

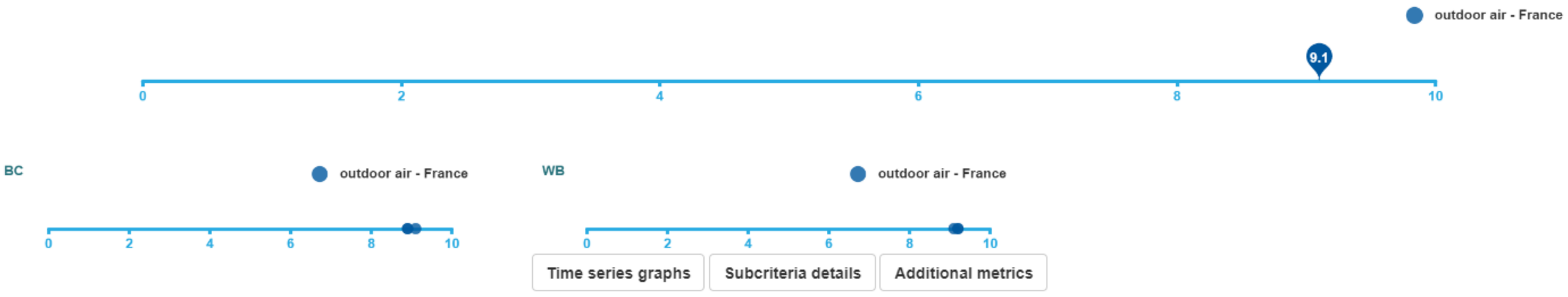
Acoem France
1967
200 chemin des Ormeaux
69460 Limonest, France

N° SIREN 409869708
www.acoem.com

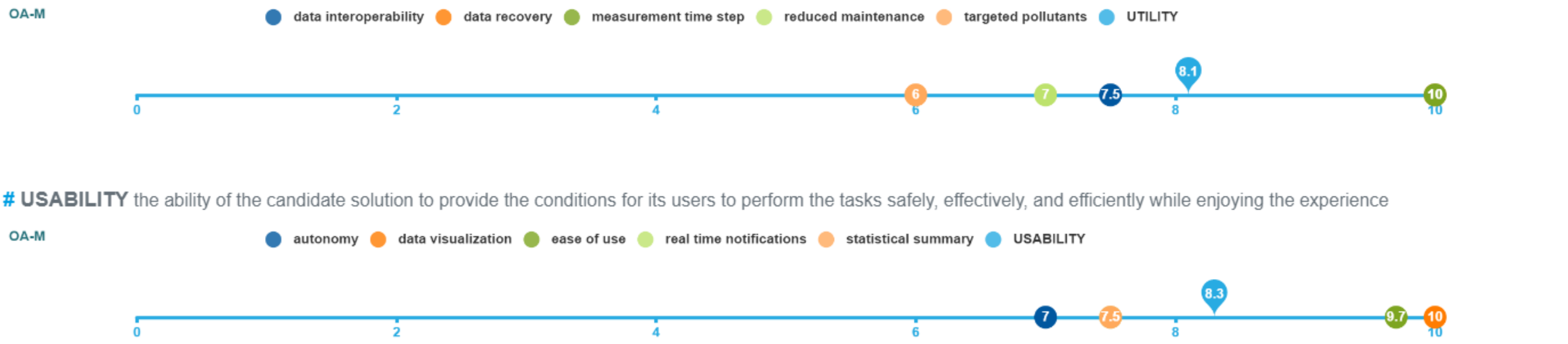
Met One Instruments
POWERED BY ACOEM

Detailed report

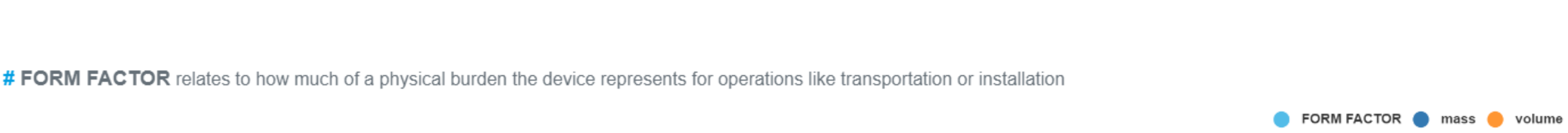
 # ACCURACY on 3 microsensors based on the SET method (Fishbain et al. 2017)



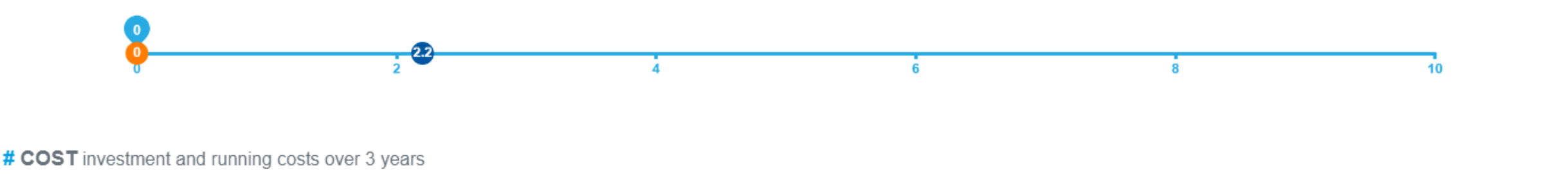
 # UTILITY the capacity of a sensor system to provide the essential functionalities for accomplishing the application objectives



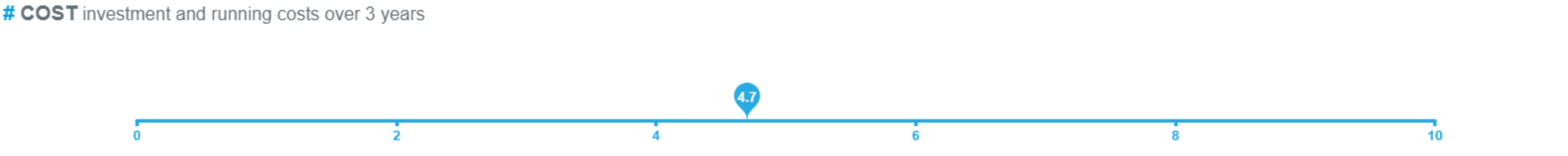
 # USABILITY the ability of the candidate solution to provide the conditions for its users to perform the tasks safely, effectively, and efficiently while enjoying the experience



 # FORM FACTOR relates to how much of a physical burden the device represents for operations like transportation or installation



 # COST investment and running costs over 3 years



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