

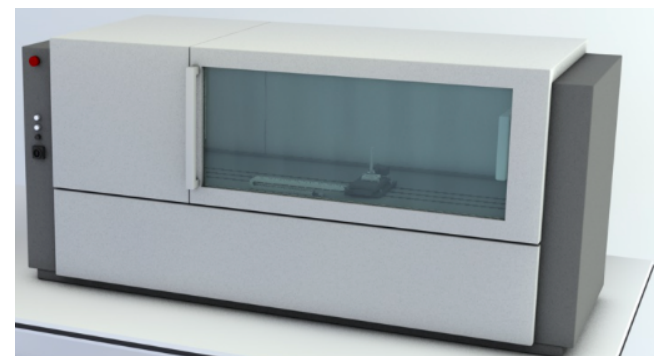
# Tomograph technical specifications

## Tomocold (RX Solutions)



@CEN since 2019  
@ Col de Porte since 10/2021

## TomoPolar (ProCon)



@CEN since 09/2022  
@CHARS winter 2023-2024  
@CEN campus summer 2024

Operating at  $[-30^{\circ}\text{C}, +2^{\circ}\text{C}]$

|                           | Tomocold                                                                                                  | TomoPolar                                                                                                  |
|---------------------------|-----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| Maximum scanned volume    | Diameter : 180 mm x Height : 250 mm @low resolution<br>Diameter : 20 mm x Height : 90 mm @high resolution | Diameter : 180 mm x Height : 390 mm @low resolution<br>Diameter : 20 mm x Height : 190 mm @high resolution |
| Heighest resolution       | 5 microns                                                                                                 | 2 microns                                                                                                  |
| Transportability          | Difficult (slightly complex dismantling)                                                                  | Easy (easy dismantling) + transport box                                                                    |
| Generator                 | Hamamatsu L9181-02 (sealed tube, tungsten target, reflexion)                                              | Hamamatsu L12531 (sealed tube, tungsten target, transmission)                                              |
| Generator voltage         | 130 kV                                                                                                    | 110 kV                                                                                                     |
| Generator power           | 39 W                                                                                                      | 16 W                                                                                                       |
| Generator focal spot size | 5 microns                                                                                                 | 2 microns                                                                                                  |
| Generator min FOD         | 12 + 3 mm                                                                                                 | 1 + 3 mm                                                                                                   |
| Detector type             | Flat Panel                                                                                                | Flat panel Varex XRD3025N-G22-A                                                                            |
| Detector size             | 1920 x 1536                                                                                               | 3008 x 2512                                                                                                |
| Detector pixel pitch      | 127 microns                                                                                               | 100 microns                                                                                                |
| Vertical axis stroke      | 150 mm                                                                                                    | 200 mm                                                                                                     |
| Zoom axis                 | 520 mm                                                                                                    | 325 mm                                                                                                     |
| Lateral axis              | 150 mm                                                                                                    | None                                                                                                       |
| Detector axis             | None                                                                                                      | +/- 25 mm                                                                                                  |
| Weight                    | 700 kg                                                                                                    | ~ 1000 kg                                                                                                  |