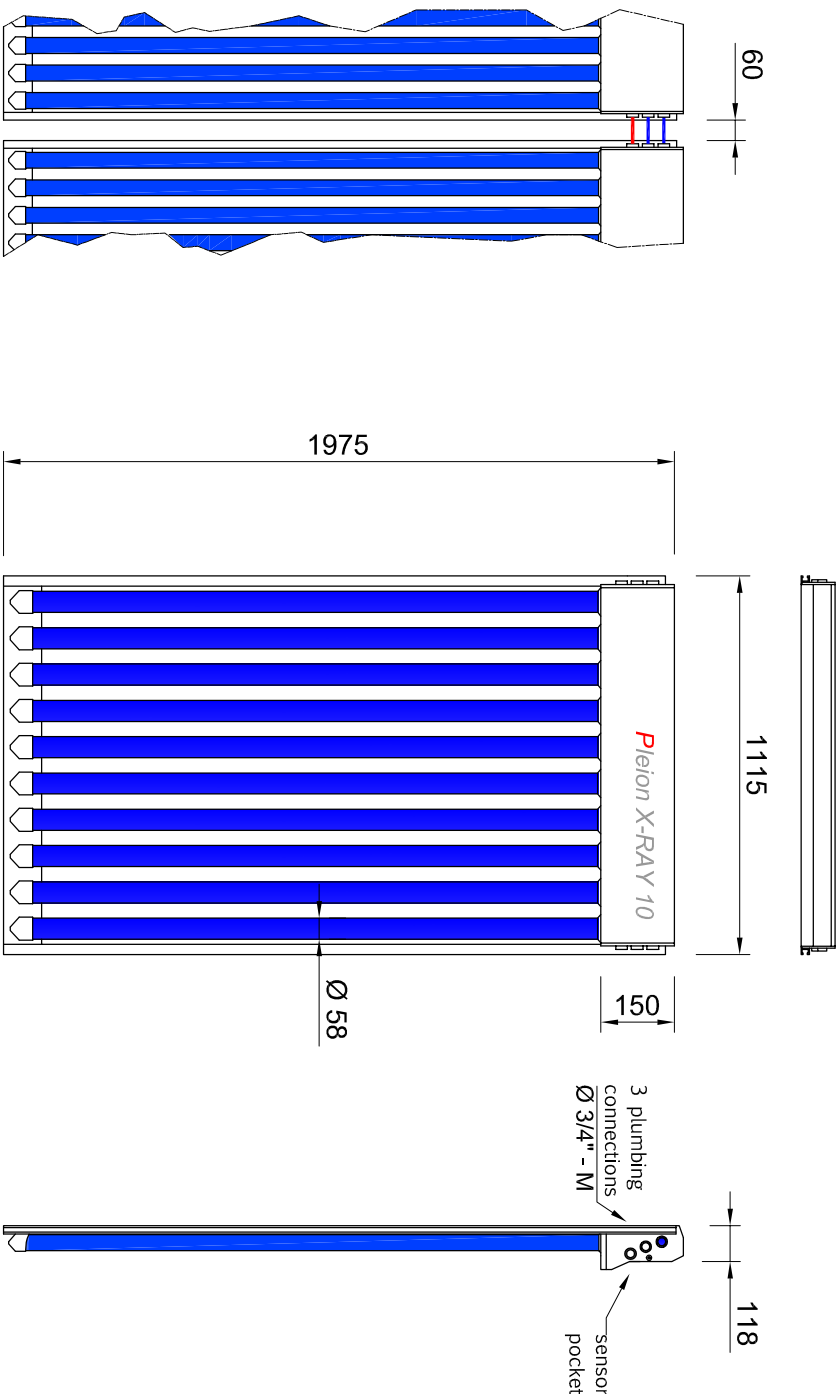




## TECHNICAL DATA SHEET

High efficiency vacuum solar collectors Pleion X-Ray 10 consisting of ten 58 mm diameter borosilicate double air casing vacuum tubes. Anodized aluminum framework for strength. Direct and diffused solar radiation penetrates the outside of the tubes and is captured in the absorber. The X-Ray 10 collector comes with a parabolic reflector which enhances the annual Energy performance. A special aluminum absorber inside the glass tube transfers the heat to the copper U tube inside the tubes. Strength, reduced overall dimensions, energy performance and exclusive design make it a quality benchmark for the solar thermal market. The exclusive plumbing connections of the X-Ray 10 collector with a third integrated pipe enables up to 12 solar collectors to be connected in series, with no need to install a return line. This drastically reduces installation costs and time, ensures balanced plumbing systems and a clean stylish appearance.

Pleion X-Ray 10 may be fixed to any kind of surface.  
The third lateral pipe fitting enables an integrated plumbing system to be fitted with parallel distribution for enhanced Energy performance compared with normal collectors in series.

| MEASUREMENTS (length x width x height) | [mm]                   | 1975x115x118  |
|----------------------------------------|------------------------|---------------|
| GROSS SURFACE AREA                     | [m <sup>2</sup> ]      | 2.202         |
| APERTURE AREA                          | [m <sup>2</sup> ]      | 1.912         |
| ABSORBER SURFACE 360°                  | [m <sup>2</sup> ]      | 2.574         |
| WEIGHT WHEN EMPTY                      | [kg]                   | 41,5          |
| FLUID CONTENT                          | [l]                    | 2,48          |
| MAX TEST PRESSURE                      | [bar]                  | 10            |
| RECOMMENDED CAPACITY                   | [l/(m <sup>2</sup> h)] | 1,5           |
| PEAK POWER                             | [W]                    | 1285          |
| OUTPUT $\eta_0$                        | [%]                    | 86,2          |
| TRANSMITTANCE COEFFICIENT $a_1$        | [W/m <sup>2</sup> K]   | 0,735         |
| TRANSMITTANCE COEFFICIENT $a_2$        | [W/m <sup>2</sup> K]   | 0,0086        |
| ABSORPTION COEFFICIENT                 | [%]                    | >84,5 +4,-2   |
| EMISSION COEFFICIENT                   | [%]                    | < 6,5 +4,-0,5 |
| COEFFICIENT TRANSFER OF THE GLASS      | [%]                    | >81,5 +4,-1   |
| CONNECTIONS                            | [inch]                 | 6 per 3/4-M   |
| STAGNATION TEMPERATURE                 | [°C]                   | 316           |

**Pleion S.r.l.**  
*Solar Thermal System*

OGGETTO :  
Vacuum tube collector Pleion  
X-RAY 10

COMMITTENTE :

RIFERIMENTO :

Questo sistema è puramente indicativo e non costituisce un'offerta commerciale.  
La progettazione specifica e la conseguente messa in opera sono di esclusiva competenza dell'ingegnere Pleion, al quale si rimanda per le condizioni di garanzia e di manutenzione.  
Pleion si riserva la proprietà di questo disegno con la sottoscrizione scritta.

SCHEMA :  
Technical data sheet  
REVISIONE :

DATA :  
06.11.2012  
DISEGNATO :  
CONTROLLATO :