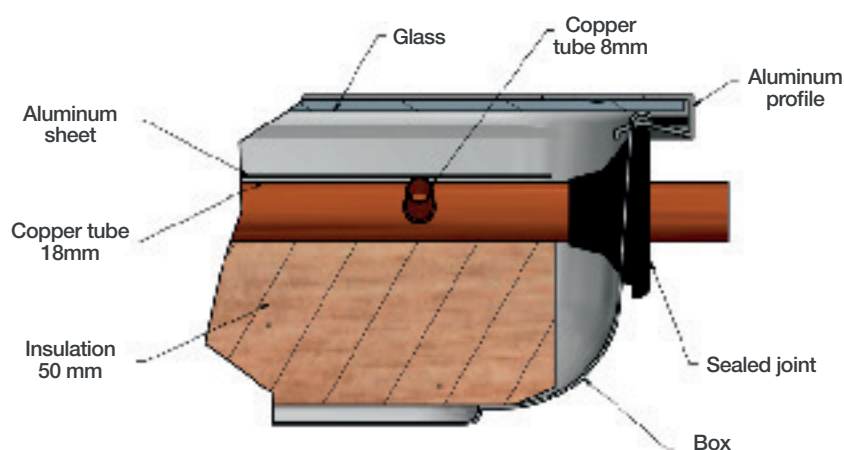
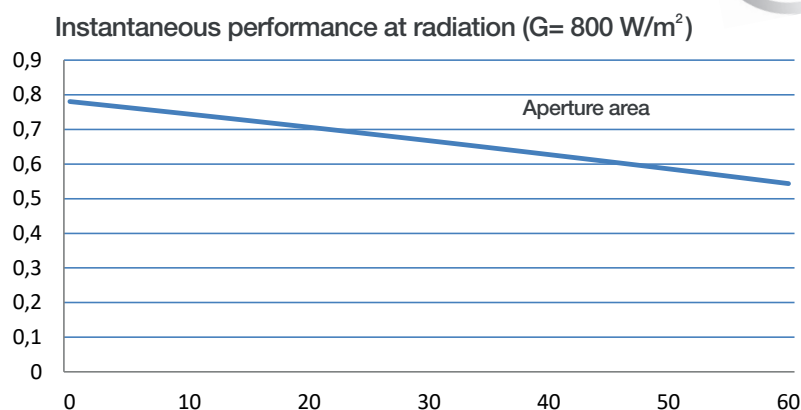


FLAT SOLAR COLLECTORS PLATINUM FAMILY



P21 COLLECTOR



Technical Characteristics

EN 12975 Standard

EN ISO 9806 Standard

	Referred to aperture area and T_m	Referred to gross area and T_m
Optic factor ($\eta_{0,hem}$)	0.780	0.685
Loss factor K_1 (W / Km^2)	3.672	3.150
Loss factor K_2 (W / $\text{K}^2 \text{ m}^2$)	0.006	0.006
Peak power (W)	1569	
Incident Angle Modier 50°	0.92	

Dimensions

External dimensions	
Length (mm)	2095
Width (mm)	1092
Thickness (mm)	100
Gross Area (m^2)	2.29
Aperture Area (m^2)	2.01

P21 COLLECTOR



Absorber	
Type	Arp One-n
Fin material	Aluminum
Pipes Material	Copper
Type of welding	Laser
Number of manifolds pipes	2
Number of secondary pipes	9

External Diameter	
Manifold pipes (mm)	18
Secondary pipes (mm)	8

Coating	
Type	Ultrasselective Tinox Robust
Base Material	Aluminum
Method of applying	Sputtering
Absorptance (%)	94
Emittance (%)	4

Insulation	
Type	Blanked
Material	Glass Wool
Length (mm)	2060
Width (mm)	910
Thickness (mm)	50
Conductivity (W/m ² k)	0.034

Frame	
Type	Extruded
Material	Aluminum AL 6063
Length (mm)	2080
Width (mm)	1085
Thickness (mm)	100

General Characteristics	
Cover	Solar tempered glass 3,2 mm
Optimal flow	30 l/hm ²
Empty weigth (kg)	38
Heat transfer fluid	Propilenglicol
Capacity (litres)	1.15
Maximum work pressure (bar)	8
Stagnation Temperature (°C)	220
Heat capacity (J/K)	10347
Connections	Compress Fitting

Pressure drop					
Flow (kg/s)	0,0117	0,250	0,040	0,0533	0,0683
Pressure loss (Pa)	122	288	507	717	980

