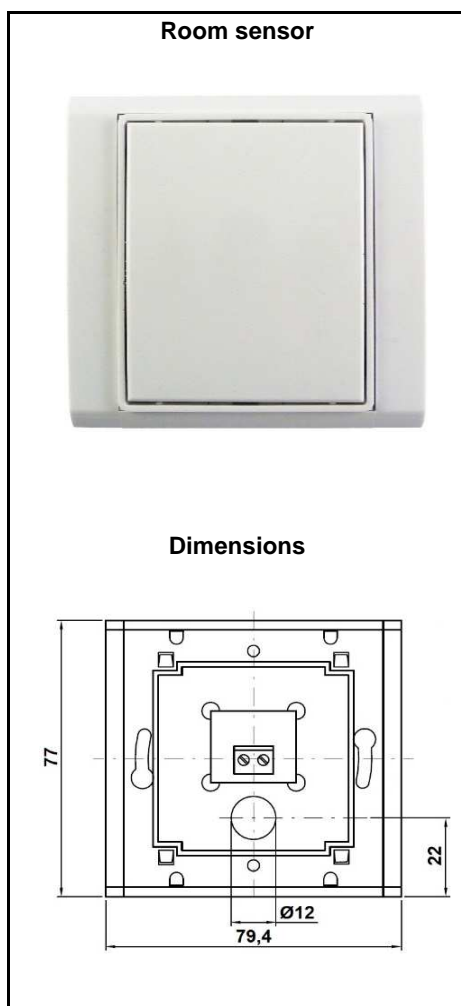


RS 10 Room Sensor for IR Controllers



Main features	
Application	room temperature sensor for IR controllers
Description	Pt1000 resistance temperature sensor in a plastic blanking cover
Function	Pt1000 sensor measures room temperature based on the relation between temperature and resistance
Code	16 167

Technical data	
Temperature measurement	-50 to 130 °C
Resistance at 0 °C	1000 Ω
Temperature coefficient	3850 ppm / °C
Tolerance	B
IP rating	IP30
Recommended measuring current	0.3 mA
Max. measuring current	2 mA

Terminal board data	
Terminal pitch	3.5 mm
Conductor cross diameter	0.5 to 1.5 mm ²

Cover data	
Cover parts	blanking cover with mounting bracket, frame
Colour	white
Material	PC
Weight	40 g

Dependence of sensor resistance on temperature		
θ [°C]	R [Ω]	dependence expressed by the equation: resulting resistance R is calculated by: $R = R_0 \cdot (1 + A \cdot \theta + B \cdot \theta^2 + C \cdot [\theta - 100] \cdot \theta^3)$ for -50 to 0 °C $R = R_0 \cdot (1 + A \cdot \theta + B \cdot \theta^2)$ for 0 to 400 °C $A = 3,9083 \cdot 10^{-3} \text{ °C}^{-1}$ $B = -5,775 \cdot 10^{-7} \text{ °C}^{-2}$ $C = -4,183 \cdot 10^{-12} \text{ °C}^{-4}$ $R_0 = 1000 \text{ Ω}$ θ ... design temperature [°C]
-50	803,06	
-25	901,92	
0	1000,00	
25	1097,35	
50	1193,97	
75	1289,87	
100	1385,06	
125	1479,51	
150	1573,25	
175	1666,27	
200	1758,56	