

# Unisense Temperature Microsensor Specifications

	TP2000	Glass		
		Standard	Options	Extra price for option selection
Outside tip diameter	2 mm	TP-200 (180-220µm) TP-500 (400-600µm)		
Diameter 20mm from tip	2 mm	< 2mm	< 1mm	10 %
Diameter 50mm from tip	N/A	8mm	< 2mm	20 %
Total length	40 mm	150-250mm	70-350mm	20-50 %
Shaft diameter	8 mm	8mm		
Shaft protection diameter*	11 mm	11mm	Can be omitted	
<b>Cabling etc.</b>				
Cable	Habia		Standard thermocouple cable (type T)	
Cable length	1.5-2 m	1.5-2m	0-5m	Yes, depends on length
Connector	Lemo		Standard thermocouple connector (type T)	
In situ mini connectors*	No	No	Yes	
<b>Characteristics</b>				
Type	Mineral insulated thermocouple	Thermocouple, copper / constantan (type T)		
Waterproof	Yes	Yes		
Temperature range	-40°C-80°C	-10°-70°C		
Temperature range tip	-40°C - 100°C	-20°-100°C		
Guaranteed life time	2 years	3 months		
Expected life time	years	> 1 Year		
Spatial resolution	N/A	about 2 times outside tip diameter		
Output	40µV per °C	40µV per °C		
Resolution	0.1°C	0.1°C		
Response time (90%)	< 3 s	< 3s		

\* When mounted with in situ mini connectors, the shaft has no protection mounted, but fits directly into the in situ sensor mounts with pressure compensation. In situ sensors have a standard length of 130-160 mm.