

Name of Accreditation Program	JCSS Accreditation Program
Accreditation No.	JCSS0083
Date of Initial Accreditation	2002-06-25
Latest Date of Issue	2018-08-27
Name and Address of Accredited Organization	Calibration Laboratory, Sukegawa Electric Co., Ltd. 3333-23 Kamitezuna, Takahagi-shi, Ibaraki 318-0004, Japan JCN 6050001023279
Inquiry Point	Calibration Laboratory Tel: +81-293-22-0389 FAX: +81-293-22-0383
Accreditation Standards	ISO/IEC 17025:2005 (Calibration)
Accreditation Scope	As attached

*JCN : Japan Corporate Number

General Field of Calibration : Temperature

Date of Initial Accreditation of the Field : 2002-06-25

Permanent Laboratory/On-site Calibration : Permanent Laboratory

Calibration Procedures# and Type of Instruments/Materials to be calibrated		Range	CMC (Level of Confidence Approximately 95 %)		
Contact Type Thermometer	Fixed point apparatus	Triple point of water	2.5 mK		
		Freezing point of Tin	5.6 mK		
		Freezing point of Zinc	7.0 mK		
	Resistance thermometer (Fixed point calibration)			$W(T_{90})$ (*1)	$R(T_{90})$ (*2)
		Triple point of water	—	3 mK	
		Freezing point of Tin	7.8 mK	—	
		Freezing point of Zinc	10 mK	—	
	Resistance thermometer (Comparison calibration)	From -40 °C up to 35 °C	6 mK	—	
		More than 35 °C up to 200 °C	9 mK	—	
		More than 200 °C up to 420 °C	13 mK	—	
	Thermocouple (Fixed point calibration)	R	Freezing point of Tin	0.21 K	
			Freezing point of Zinc	0.30 K	
		S	Freezing point of Tin	0.21 K	
			Freezing point of Zinc	0.20 K	
		B	Freezing point of Tin	0.48 K	
			Freezing point of Zinc	0.30 K	
		K,N,E,J,T	Freezing point of Tin	0.24 K	
			Freezing point of Zinc	0.46 K	
	Thermocouple (Comparison calibration)	R	From -40 °C up to 420 °C (*3)	0.2 K	
		T		0.1 K	
		K, E, J		0.2 K	
R,S,B		From 200 °C up to 1100 °C (*5)	0.6 K		
K,E,J			0.7 K		
N			0.6 K		
Temperature sensors with display unit (Comparison calibration)	Resistance thermometer	From -40 °C up to 200 °C	0.018 K		
		More than 200 °C up to 420 °C	0.020 K		
	Thermocouple	From -40 °C up to 420 °C(*3)	0.3 K		
		From 200 °C up to 1100 °C(*6)	0.8 K		

(*1) Temperature converted from the ratio of the resistance $R(T_{90})$ to $R(273.16K)$, $W(T_{90})$ (*2) Temperature converted from resistance $R(T_{90})$

(*3) Calibration using working standard of platinum resistance thermometer

(*4) Type T Range From -40 °C up to 350 °C

(*5) Calibration using standard of thermocouple

(*6) Calibration using working standard of thermocouple

#All Calibration Procedures are in-house procedures developed by this laboratory.