

# IFM TN2511 TN-045KCBD18-MFPKG/US/

### **Basic Information**

Place of Origin: Germany
Brand Name: IFM
Certification: CE
Model Number: TN2511
Minimum Order Quantity: 1
Price: USD

• Packaging Details: 15,10 x 15,40 x 4,60

Delivery Time: 10-12Days
Payment Terms: L/C, T/T
Supply Ability: 100



## **Product Specification**

Mounting: Threaded, Flush, Or With Mounting Bracket

• Housing Material: Stainless Steel, PTFE, Plastic

• Protection Rating: IP67

Connection: M12 Connector, Cable
 Certifications: CE, RoHS, UL, CSA

Accuracy: ±0.2 °COperating Temperature: -25...85 °C

Sensor Element: Thin-film, Ceramic, Or Glass

Measurement Range: -50...150 °CSupply Voltage: 10...30 V DC

• Sensor Type: Pt100, Pt1000, NTC, PTC

• Response Time: ≤ 10 Ms

• Output: 0...10 V, 4...20 MA, IO-Link

• Cable Length: 2 M, 5 M, 10 M

### **Product Description**

#### IFM TN2511 TN-045KCBD18-MFPKG/US/

Okay, let's review the details for the IFM TN2511 TN-045KCBD18-MFPKG/US/ temperature sensor:

- 1. Product Name:
- IFM TN2511 TN-045KCBD18-MFPKG/US/
- 2. Product Description:
- This is an IFM TN2511 temperature sensor with the following specifications:
- Model: TN-045KCBD18-MFPKG/US/
- Sensor type: Temperature
- 3. Key Features:
- Temperature measurement
- M18 connection
- Analog (1-wire) output
- Stainless steel housing
- Compact design
- 4. Technical Specifications:
- Measuring range: -40 to 150°C (-40 to 302°F)
- Output signal: Analog (1-wire) output
- Ambient temperature: -40 to 85°C (-40 to 185°F)
- Ingress protection: IP67
- Process connection: M18 x 1.5
- Material: Stainless steel
- 5. Applications:
- The IFM TN2511 temperature sensor is suitable for a variety of industrial applications, such as:
- Process control
- HVAC systems
- Machinery monitoring
- General temperature measurement and monitoring
- 6. Installation and Configuration:
- The sensor can be installed using the M18 process connection.
- Electrical connection is made through the analog (1-wire) output.
- Configuration and setup may be required depending on the specific application and control system integration.
- 7. Certifications and Approvals:
- The IFM TN2511 sensor is generally designed to meet relevant industrial standards and regulations, but the exact certifications may vary based on the specific model and region of use.

In summary, the IFM TN2511 TN-045KCBD18-MFPKG/US/ is a compact, stainless steel temperature sensor with an analog (1-wire) output and M18 connection, suitable for various industrial temperature measurement and monitoring applications. Please let me know if you have any other questions.

Product characteristics

_	
N	
u	
m b e r	
е	
r	
o f in	
f	
lin	
Ľ.,	
þ	
u	Number of digital outputs: 1: Number of analogue outputs: 1
ts	Number of digital outputs: 1; Number of analogue outputs: 1
a n	
ln	
d	
0	
u	
t	
p	
u	
ts	
``	
М	
e a s	
a	
S	
u	
u ri	-50150 °C
n	50502 1
a	
g r	
a	
n	
g e	
e	
1	

D 1						
o m						
m						
u ni						
c						
at io IO-Link						
io n						
in						
in te rf						
a C						
a C e						
P						
r -						
6						
e						
s						
o c e s s s c threaded connection M18 x 1	er e de la companya					
threaded connection M18 x 1	DB97NJ IBN19JNI C,					
o n						
n e						
<b>)</b>						
ct io						
n						
n						
st al						
ai   a						
la ti						
0						
n						
e						
n g t						
n g t						
n g t						
n g t						
45 t t h E L						
1 45 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						
n 45 t th E L I m						
n 45 th 45 th E L I Mm m M Application	Gold-plated contacts					
45 45 45 45 46 E L C M M M Application Special feature	Gold-plated contacts 1 x Pt 1000; (to DIN EN 60751, class A)					
n 45 t the E L I m	Gold-plated contacts 1 x Pt 1000; (to DIN EN 60751, class A) liquids and gases					
Application Special feature Measuring element Media Pressure rating [bar]	1 x Pt 1000; (to DIN EN 60751, class A)					
Application Special feature Measuring element Media Pressure rating [bar] Minimum installation depth	1 x Pt 1000; (to DIN EN 60751, class A) liquids and gases					
Application Special feature Measuring element Media Pressure rating [bar] Minimum installation depth [mm]	1 x Pt 1000; (to DIN EN 60751, class A) liquids and gases 300					
Application Special feature Measuring element Media Pressure rating [bar] Minimum installation depth [mm] Electrical data	1 x Pt 1000; (to DIN EN 60751, class A) liquids and gases 300					
n 45 g t h 45 t h E L [ mm m	1 x Pt 1000; (to DIN EN 60751, class A) liquids and gases 300					
n 45 gt t	1 x Pt 1000; (to DIN EN 60751, class A) liquids and gases 300 12  1832 DC; ("supply class 2" to cULus)					
n de	1 x Pt 1000; (to DIN EN 60751, class A) liquids and gases 300 12  1832 DC; ("supply class 2" to cULus) < 50					
n de	1 x Pt 1000; (to DIN EN 60751, class A) liquids and gases 300 12  1832 DC; ("supply class 2" to cULus) < 50 III yes 1					
n de	1 x Pt 1000; (to DIN EN 60751, class A) liquids and gases 300 12  1832 DC; ("supply class 2" to cULus) < 50 III yes					
n de	1 x Pt 1000; (to DIN EN 60751, class A) liquids and gases 300 12  1832 DC; ("supply class 2" to cULus) < 50 III yes 1					
Application Special feature Measuring element Media Pressure rating [bar] Minimum installation depth [mm] Electrical data Operating voltage [V] Current consumption [mA] Protection class Reverse polarity protection Power-on delay time [s] Integrated watchdog Inputs / outputs Number of inputs and	1 x Pt 1000; (to DIN EN 60751, class A) liquids and gases 300 12  1832 DC; ("supply class 2" to cULus) < 50 III yes 1					
Application Special feature Measuring element Media Pressure rating [bar] Minimum installation depth [mm] Electrical data Operating voltage [V] Current consumption [mA] Protection class Reverse polarity protection Power-on delay time [s] Integrated watchdog nputs / outputs Number of inputs and outputs	1 x Pt 1000; (to DIN EN 60751, class A) liquids and gases 300 12  1832 DC; ("supply class 2" to cULus) < 50 III yes 1					
n de	1 x Pt 1000; (to DIN EN 60751, class A) liquids and gases 300 12  1832 DC; ("supply class 2" to cULus) < 50 III yes 1					
Application Special feature Measuring element Media Pressure rating [bar] Minimum installation depth [mm] Electrical data Operating voltage [V] Current consumption [mA] Protection class	1 x Pt 1000; (to DIN EN 60751, class A) liquids and gases 300 12  1832 DC; ("supply class 2" to cULus) < 50 III yes 1 Number of digital outputs: 1; Number of analogue outputs: 1					
Application Special feature Measuring element Media Pressure rating [bar] Minimum installation depth [mm] Electrical data Operating voltage [V] Current consumption [mA] Protection class Reverse polarity protection Power-on delay time [s] Integrated watchdog nputs / outputs Number of inputs and outputs Outputs Total number of outputs Output signal Electrical design	1 x Pt 1000; (to DIN EN 60751, class A) liquids and gases 300 12  1832 DC; ("supply class 2" to cULus) < 50 III yes 1 Number of digital outputs: 1; Number of analogue outputs: 1					
Application Special feature Measuring element Media Pressure rating [bar] Minimum installation depth [mm] Electrical data Operating voltage [V] Current consumption [mA] Protection class Reverse polarity protection Power-on delay time [s] Integrated watchdog nputs / outputs Number of inputs and outputs Outputs Total number of outputs Output signal Electrical design Number of digital outputs	1 x Pt 1000; (to DIN EN 60751, class A) liquids and gases 300 12  1832 DC; ("supply class 2" to cULus) < 50 III yes 1 yes 2 witching signal; analogue signal; IO-Link; (configurable) PNP/NPN 1					
n de	1 x Pt 1000; (to DIN EN 60751, class A) liquids and gases 300 12  1832 DC; ("supply class 2" to cULus) < 50 III yes 1 yes  Number of digital outputs: 1; Number of analogue outputs: 1  2 switching signal; analogue signal; IO-Link; (configurable) PNP/NPN					
Application Special feature Measuring element Media Pressure rating [bar] Minimum installation depth [mm] Electrical data Operating voltage [V] Current consumption [mA] Protection class Reverse polarity protection Power-on delay time [s] Integrated watchdog nputs / outputs Number of inputs and outputs Outputs Total number of outputs Output signal Electrical design Number of digital outputs Output function Max. voltage drop switching	1 x Pt 1000; (to DIN EN 60751, class A) liquids and gases 300 12  1832 DC; ("supply class 2" to cULus) < 50 III yes 1 yes 2 witching signal; analogue signal; IO-Link; (configurable) PNP/NPN 1					
n de	1 x Pt 1000; (to DIN EN 60751, class A) liquids and gases 300 12  1832 DC; ("supply class 2" to cULus) < 50 III yes 1 yes  Number of digital outputs: 1; Number of analogue outputs: 1  2 switching signal; analogue signal; IO-Link; (configurable) PNP/NPN 1 normally open / normally closed; (parameterisable) 2.5					
Application Special feature Measuring element Media Pressure rating [bar] Minimum installation depth [mm] Electrical data Operating voltage [V] Current consumption [mA] Protection class Reverse polarity protection Power-on delay time [s] Integrated watchdog nputs / outputs Number of inputs and outputs Outputs Total number of outputs Output signal Electrical design Number of digital outputs Output function Max. voltage drop switching	1 x Pt 1000; (to DIN EN 60751, class A) liquids and gases 300 12  1832 DC; ("supply class 2" to cULus) < 50 III yes 1 yes  Number of digital outputs: 1; Number of analogue outputs: 1  2 switching signal; analogue signal; IO-Link; (configurable) PNP/NPN 1 normally open / normally closed; (parameterisable)					
n de	1 x Pt 1000; (to DIN EN 60751, class A) liquids and gases 300 12  1832 DC; ("supply class 2" to cULus) < 50 III yes  Number of digital outputs: 1; Number of analogue outputs: 1  2 switching signal; analogue signal; IO-Link; (configurable) PNP/NPN 1 normally open / normally closed; (parameterisable) 2.5					

Analogue current output	I
mA]	420
Max. load [Ω]	500
Analogue voltage output [V]	010
	2000
Short-circuit protection  Type of short-circuit	yes
protection	pulsed
Overload protection	yes
leasuring/setting range	
e	
1 45	
1	
n	
n	
) 	
-50150 °C	-58302 °F
	·
t	
-40150 °C / -40302 °F	
t	
t t i-49.8150 °C	
i-49.8150 °C	-57.6302 °F
t -50149.8 °C	
t	
-50149.8 °C	-58301.6 °F

Α		
n		
al		
0		
a		
u		
o g u e st a rt	-50145 °C	-58293 °F
st		
a		
rt		
p		
p oi		
n		
t		
A		
n		
al		
g		
ľ	-45150 °C	140, 000 05
<b>E</b>		-49 302 °F ∥
اما	-43130 0	-49302 °F
e	-45150 0	-49302 °F
e n	-45130 0	-49302 °F
e n d	-45130 0	-49302 °F
e n d p oi	-43130 0	-49302 °F
o gueend poin	-43130 0	-49302 °F
e n d p oi n t	-45130 0	-49302 °F
n t	-4J130 C	-49302 °F
n t In	- <del>-</del> 45130 C	-49302 °F
n t In		
n t In	0.1 °C	0.1 °F
n t In		
n t In		
n t In st		



Sienteng Zhongbao Industrial Park, Longdong Community, Baolong Street, Longgang District, Shenzhen