



#### **ABOUT TIMES-7**

We are a high-tech company specializing in the design and manufacture of RAIN (UHF) RFID antennas.

Our journey began in 2006, when Times-7 was founded. Since then, we have developed the largest portfolio of fixed RAIN RFID reader antennas, which are famous for their quality and performance.

We are based in Lower Hutt, New Zealand, but our reach extends worldwide as we export our products through our authorized partner network.

In addition to our world-class products and in-depth expertise, our customers appreciate Times-7's customer service and technical support.

We are responsive in supporting a large global customer base and ensuring the success of our customer's implementations.

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Patent Info: www.times-7.com/patents

For optimal performance, we offer a selection of low-loss cable accessories. All our cables come with SMA to RPTNC connectors; we can customize them to your specific requirements, including length and connectors. For additional information and pricing, please reach out to sales@times-7.com.

### To make sure you select the right cable for your application...

...consider the following three important cable criteria:

a. Cable Loss: Determine the acceptable power loss before it significantly impacts read performance.

b. Bending Radius: Assess how flexible the cable needs to be.

c. Cable Thickness: Ensure the cable or cable connector is not thicker than the antenna when flush mounting it.

For more information on choosing the correct cable, please click here.

### **Cable Loss**

Cable Type	Cable Length	Approx. Losses (dB)
T-7 195	2m	0.65
T-7 240	2m	0.39
	4m	0.78
	6m	1.17
	8m	1.56
T-7 400	2m	0.26
	4m	0.51
	6m	0.77
	8m	1.03

### **Ordering Information**

Cable Accessories	Cable Type / Part No.		
	195	240	400
Cable 2m, SMA to RPTNC	71436	71782	72042
Cable 4m, SMA to RPTNC	N/A	71784	72043
Cable 6m, SMA to RPTNC	N/A	71904	72044
Cable 8m, SMA to RPTNC	N/A	71788	72045





# **Construction Specifications**

	Material	Diameter		
		T-7 195	T-7 240	T-7 400
1. Inner Conductor	Solid Copper	0.94	1.42	2.74
2. Dielectric	Physical Foam Polyethylene	2.79	3.81	7.24
3. Outer Conductor	Bonded Aluminium Foil + Tinned Copper Braid	3.53	4.52	8.13
4. Jacket	Black PVC or Polyethylene	4.95	6.10	10.29

## **Electrical Specifications**

Specifications:	T-7 195	T-7 240	T-7 400
Capacitance (pF/m):	79.5	79.4	77.1
Impedance (ohm):	50		
Velocity (%):	80	84	85
Inner Conductor DC Resistance (Ω/km):	24.94	10.50	2.92
Outer Conductor DC Resistance (Ω/km):	16.08	12.76	5.41
Shielding Effectiveness (dB):	>90		
VSWR ≤ (Return loss ≥ dB):	1.10 (26)		

### Mechanical and Environmental Specifications

Specifications	T-7 195	T-7 240	T-7 400
Min. Bend Radius	25 mm	30 mm	51 mm
Storage Temperature	-40 °C - + 80 °C -40 °F - + 112 °F		
Installation Temperature	-40 °C - + 80 °C -40 °F - + 112 °F		
Operating Temperature	-40 °C - + 80 °C -40 °F - + 112 °F		

### Attenuation and Average Power (20 °C)

	T-7 195	T-7 240	T-7 400
Attenuation (≯ dB/100 m)	36.50	24.80	12.80
Average Power (kW)	0.14	0.23	0.50

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