

# HUBER+SUHNER® DATA SHEET

## Coaxial Cable: RG\_214\_/U

Rev.: H



### Description

PE-50 Ohm - double screen

### Technical Data

#### Construction

	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Strand-07	2.25 mm
Dielectric	PE		7.28 mm
Outer conductor	Copper, Silver plated	Braid, 93 %	8 mm
Outer conductor	Copper, Silver plated	Braid, 95 %	8.7 mm
Jacket	PVC II (non migration)	RAL 9005 - bk	10.8 mm +/- 0.15
Print	HUBER+SUHNER RG 214 U 50 Ohm (PA no.)		

#### Electrical Data

Impedance	50	$\Omega$ +/- 2
Max. operating frequency	6	GHz
Capacitance	101	pF/m
Velocity of signal propagation	66	%
Signal delay	5.03	ns/m
Insulation resistance	$\geq 1 \times 10^8$	M $\Omega$ m
Min. screening effectiveness	>71	dB (up to 1 GHz)
Max. operating voltage		kV <sub>rms</sub> (at sea level)
Test voltage	10	kV <sub>rms</sub> (50 Hz/1 min)

#### Mechanical Data

Weight	18.5	kg/100 m
Min. bending radius	static	55 mm
	repeated (for max. 50 bendings)	108 mm

#### Environmental Data

Temperature range	-25 °C... + 85 °C
Installation temperature	-20 °C... + 60 °C
2002/95/EC (RoHS)	compliant

#### Ordering Information

Order as RG\_214\_/U

#### Additional Information

##### Remarks

(For details refer to the HUBER+SUHNER RF CABLES GENERAL CATALOGUE or contact your nearest HUBER+SUHNER partner)

#### Suitable Connectors

Cable group	crimped (U32)
	clamped (U33)
	soldered —

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**Matrix**                      **Attenuation** [ formula:  $(a \cdot f^{0.5} + b \cdot f)$  ] **and Power CW** [ formula:  $(p \cdot f^{0.5})$  ]

Coefficients:

a=	0.179	b=	0.063	f <sub>max.</sub> =	6	p <sub>at</sub> 1GHz =	325
	<b>Frequency</b>		<b>Nom. attenuation</b>		<b>Nom. attenuation</b>		<b>Max. CW power</b>
	<b>(GHz)</b>		<b>(dB / m)</b>		<b>(dB / ft)</b>		<b>(watt)</b>
			sea level 25° C ambient temperature		sea level 25° C ambient temperature		sea level 40° C ambient temperature
	0.3		0.12		0.037		593
	0.6		0.18		0.055		420
	0.9		0.23		0.070		343
	1.2		0.27		0.082		297
	1.5		0.31		0.094		265
	1.8		0.35		0.107		242
	2.1		0.39		0.119		224
	2.4		0.43		0.131		210
	2.7		0.46		0.140		198
	3.0		0.50		0.152		188
	3.3		0.53		0.162		179
	3.6		0.57		0.174		171
	3.9		0.60		0.183		165
	4.2		0.63		0.192		159
	4.5		0.66		0.201		153
	4.8		0.69		0.210		148
	5.1		0.73		0.222		144
	5.4		0.76		0.232		140
	5.7		0.79		0.241		136
	6.0		0.82		0.250		133

HUBER+SUHNER is certified according to ISO 9001 and ISO 14001

**WAIVER!**

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**HUBER+SUHNER AG**  
**RF Industrial**  
**9100 Herisau, Switzerland**  
 Phone +41 (0)71 353 41 11  
 Fax +41 (0)71 353 45 90  
 www.hubersuhner.com

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