

# HUBER+SUHNER® DATA SHEET

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

Rev.: I



### 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 (low 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	5	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	-20 °C... + 60 °C	-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=	0.202	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		0.13		0.040		593
	0.6		0.19		0.058		420
	0.9		0.25		0.076		343
	1.2		0.30		0.091		297
	1.5		0.34		0.104		265
	1.8		0.38		0.116		242
	2.1		0.43		0.131		224
	2.4		0.46		0.140		210
	2.7		0.50		0.152		198
	3.0		0.54		0.165		188
	3.3		0.57		0.174		179
	3.6		0.61		0.186		171
	3.9		0.64		0.195		165
	4.2		0.68		0.207		159
	4.5		0.71		0.216		153
	4.8		0.74		0.226		148
	5.1		0.78		0.238		144
	5.4		0.81		0.247		140
	5.7		0.84		0.256		136
	6.0		0.87		0.265		133

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

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