

## RLA++ cable series

- Quad shielded Class A++ fly lead
- 105dB to 1GHz
- Incorporating Technetix F-Safe™ and IEC-Safe™ Class A++ Connectors
- Frequency range 5-2400 MHz
- Moulded strain relief
- IEC connectors feature superior impedance characteristics
- Straight and right angled connector versions available



### Overview

The quality of service a user experiences is only as strong as the weakest link, therefore the quality and reliability of fly leads is as important as the other components of a cable system.

Attention to detail in the specification of the materials, construction and performance characteristics ensures that the customer experience is optimised from installation and throughout a long service life. Precise dimensioning and the outstanding resilience of the connectors and inner pins delivers a very reliable connection. The connectors are tightly secured and moulded to the cables to ensure good pull and strain relief.

The cables' inner conductors are soldered to their inner pins to maintain excellent electrical and mechanical performance.

There are many external sources of electromagnetic radiation present in the in home environment, including short wave radio, mobile phones, DVB-T and others.

The screening effectiveness of a fly lead therefore needs to mitigate the effects of both the egress and ingress of unwanted signals. To meet these requirements, the RF specification of the Technetix fly leads exhibits low insertion loss, high return loss and exceeds Class A++ screening effectiveness over the whole frequency range, using quadruple shielding with a mix of braids and foils.

## Specifications

## RLA++ Straight Combinations

	MHz	IEC-male to IEC-female	IEC-female to F-male	IEC-male to F-male	F-male to F-male
<b>Frequency</b>	5 - 2400				
<b>Insertion loss (dB, max)</b>					
length 1.5m	5 - 1006 MHz	0.8	0.7	0.6	0.9
	1006 - 2400 MHz	2.6	2.1	1.8	1.3
length 3.0m	5 - 1006 MHz	1.7	01.6	1.5	1.8
	1006 - 2400 MHz	3.8	3.5	3.1	2.7
length 5.0m	5 - 1006 MHz	2.9	2.8	2.9	3.0
	1006 - 2400 MHz	5.9	5.1	4.7	4.5
<b>Return loss (dB, min)</b>	5 - 12 MHz	25.0	25.0	25.0	25.0
	12 - 30 MHz	25.0	25.0	25.0	25.0
	30 - 300 MHz	25.0	25.0	25.0	25.0
	300 - 470 MHz	22.0	25.0	23.0	25.0
	470 - 1006 MHz	17.0	22.0	20.0	23.0
	1006 - 1700 MHz	12.0	18.0	15.0	20.0
	1700 - 2400 MHz	9.0	16.0	12.0	18.0
<b>Screening Class A++</b> (except 5 to 12 MHz)	5 - 12 MHz	≤ 2.5 mΩ/m	≤ 2.5 mΩ/m	≤ 2.5 mΩ/m	≤ 2.5 mΩ/m
	12 - 30 MHz	≤ 0.9 mΩ/m	≤ 0.9 mΩ/m	≤ 0.9 mΩ/m	≤ 0.9 mΩ/m
	30 - 300 MHz	> 105.0 dB	> 105.0 dB	> 105.0 dB	> 105.0 dB
	300 - 470 MHz	> 105.0 dB	> 105.0 dB	> 105.0 dB	> 105.0 dB
	470 - 1006 MHz	> 105.0 dB	> 105.0 dB	> 105.0 dB	> 105.0 dB
	1006 - 2000 MHz	> 95.0 dB	> 95.0 dB	> 95.0 dB	> 95.0 dB
	2000 - 2400 MHz	> 85.0 dB	> 85.0 dB	> 85.0 dB	> 85.0 dB
<b>Impedance (Ohm)</b>	75				

## RLA++ Right Angled Combinations

	MHz	IEC-male to IEC-female	IEC-female to F-male	IEC-male to F-male	F-male to F-male
<b>Frequency</b>	5 - 2400				
<b>Insertion loss (dB, max)</b>					
length 1.5m	5 - 1006 MHz	0.8	0.7	0.6	0.9
	1006 - 2400 MHz	2.6	2.1	1.8	1.3
length 3.0m	5 - 1006 MHz	1.7	01.6	1.5	1.8
	1006 - 2400 MHz	3.8	3.5	3.1	2.7
length 5.0m	5 - 1006 MHz	2.9	2.8	2.9	3.0
	1006 - 2400 MHz	5.9	5.1	4.7	4.5
<b>Return loss (dB, min)</b>	5 - 12 MHz	25.0	25.0	25.0	25.0
	12 - 30 MHz	25.0	25.0	25.0	25.0
	30 - 300 MHz	25.0	25.0	25.0	25.0
	300 - 470 MHz	22.0	25.0	23.0	25.0
	470 - 1006 MHz	17.0	22.0	20.0	23.0
	1006 - 1700 MHz	12.0	18.0	15.0	20.0
	1700 - 2400 MHz	8.0	14.0	12.0	16.0
<b>Screening Class A++</b> (except 5 to 12 MHz)	5 - 12 MHz	≤ 2.5 mΩ/m	≤ 2.5 mΩ/m	≤ 2.5 mΩ/m	≤ 2.5 mΩ/m
	12 - 30 MHz	≤ 0.9 mΩ/m	≤ 0.9 mΩ/m	≤ 0.9 mΩ/m	≤ 0.9 mΩ/m
	30 - 300 MHz	> 105.0 dB	> 105.0 dB	> 105.0 dB	> 105.0 dB
	300 - 470 MHz	> 105.0 dB	> 105.0 dB	> 105.0 dB	> 105.0 dB
	470 - 1006 MHz	> 105.0 dB	> 105.0 dB	> 105.0 dB	> 105.0 dB
	1006 - 2000 MHz	> 95.0 dB	> 95.0 dB	> 95.0 dB	> 95.0 dB
	2000 - 2400 MHz	> 85.0 dB	> 85.0 dB	> 85.0 dB	> 85.0 dB
<b>Impedance (Ohm)</b>	75				

## Connector colour code

F-male	red
IEC-male	blue
IEC-female	green

## Ordering information

## Straight Combinations

Article Number	Item Name	Description
19005202	RLA++10-1.5B	RLA++ FLYLEAD IEC-M - IEC-F 1.5M BLACK
19005203	RLA++10-3B	RLA++ FLYLEAD IEC-M - IEC-F 3M BLACK
19005204	RLA++10-5B	RLA++ FLYLEAD IEC-M - IEC-F 5M BLACK
19005205	RLA++12-1.5B	RLA++ FLYLEAD IEC-M - F-M 1.5M BLACK
19005206	RLA++12-3B	RLA++ FLYLEAD IEC-M - F-M 3M BLACK
19005207	RLA++12-5B	RLA++ FLYLEAD IEC-M - F-M 5M BLACK
19005208	RLA++30-1.5B	RLA++ FLYLEAD F-M - F-M 1.5M BLACK
19005209	RLA++30-3B	RLA++ FLYLEAD F-M - F-M 3M BLACK
19005210	RLA++30-5B	RLA++ FLYLEAD F-M - F-M 5M BLACK
19005211	RLA++40-1.5B	RLA++ FLYLEAD IEC-F - F-M 1.5M BLACK
19005212	RLA++40-3B	RLA++ FLYLEAD IEC-F - F-M 3M BLACK
19005213	RLA++40-5B	RLA++ FLYLEAD IEC-F - F-M 5M BLACK
19005928	RLA++40-3W	RLA++ FLYLEAD IEC-F - F-M 3M WHITE
19005929	RLA++10-1.5W	RLA++ FLYLEAD IEC-M - IEC-F 1.5M WHITE
19005930	RLA++10-3W	RLA++ FLYLEAD IEC-M - IEC-F 3M WHITE
19005931	RLA++10-5W	RLA++ FLYLEAD IEC-M - IEC-F 5M WHITE
19005932	RLA++12-1.5W	RLA++ FLYLEAD IEC-M - F-M 1.5M WHITE
19005933	RLA++12-3W	RLA++ FLYLEAD IEC-M - F-M 3M WHITE
19005934	RLA++12-5W	RLA++ FLYLEAD IEC-M - F-M 5M WHITE
19005935	RLA++30-1.5W	RLA++ FLYLEAD F-M - F-M 1.5M WHITE
19005936	RLA++30-3W	RLA++ FLYLEAD F-M - F-M 3M WHITE
19005937	RLA++30-5W	RLA++ FLYLEAD F-M - F-M 5M WHITE
19005938	RLA++40-1.5W	RLA++ FLYLEAD IEC-F - F-M 1.5M WHITE
19005939	RLA++40-5W	RLA++ FLYLEAD IEC-F - F-M 5M WHITE

## Right Angled Combinations

Article Number	Item Name	Description
19008548	RLA++-11-1.5B	RLA++FLYLEAD IEC-M - IEC-F RA 1.5M BLACK
19008549	RLA++-11-3B	RLA++FLYLEAD IEC-M - IEC-F RA 3M BLACK
19008550	RLA++-11.5B	RLA++FLYLEAD IEC-M - IEC-F RA 5M BLACK
19008551	RLA++-20-1.5B	RLA++FLYLEAD IEC-M RA - IEC-F 1.5M BLACK
19008552	RLA++-20-3B	RLA++FLYLEAD IEC-M RA - IEC-F 3M BLACK
19008553	RLA++-20-5B	RLA++FLYLEAD IEC-M RA - IEC-F 5M BLACK
19008554	RLA++-21-1.5B	RLA++FLYLEAD IEC-M RA - IEC-F RA 1.5M BLACK
19008555	RLA++-21-3B	RLA++FLYLEAD IEC-M RA - IEC-F RA 3M BLACK
19008556	RLA++-21-5B	RLA++FLYLEAD IEC-M RA - IEC-F RA 5M BLACK
19008557	RLA++-22-1.5B	RLA++FLYLEAD IEC-M RA - F-M 1.5M BLACK
19008558	RLA++-22-3B	RLA++FLYLEAD IEC-M RA - F-M 3M BLACK
19008559	RLA++-22-5B	RLA++FLYLEAD IEC-M RA - F-M 5M BLACK
19008560	RLA++-31-1.5B	RLA++FLYLEAD IEC-F RA - F-M 1.5M BLACK
19008561	RLA++-31-3B	RLA++FLYLEAD IEC-F RA - F-M 3M BLACK
19008562	RLA++-31-5B	RLA++FLYLEAD IEC-F RA - F-M 5M BLACK
19008563	RLA++-50-1.5B	RLA++FLYLEAD F-M RA - F-M 1.5M BLACK
19008564	RLA++-50-3B	RLA++FLYLEAD F-M RA - F-M 3M BLACK
19008565	RLA++-50-5B	RLA++FLYLEAD F-M RA - F-M 5M BLACK
19008566	RLA++-55-1.5B	RLA++FLYLEAD F-M RA - F-M RA 1.5M BLACK
19008567	RLA++-55-3B	RLA++FLYLEAD F-M RA - F-M RA 3M BLACK
19008568	RLA++-55-5B	RLA++FLYLEAD F-M RA - F-M RA 5M BLACK
19008726	RLA++-57-1.5B	RLA++FLYLEAD IEC-M - F-M RA 1.5M BLACK
19008727	RLA++-57-3B	RLA++FLYLEAD IEC-M - F-M RA 3M BLACK
19008728	RLA++-57.5B	RLA++FLYLEAD IEC-M - F-M RA 5M BLACK

Also available in other colours, connector combinations and lengths

© Copyright 2016 Technetix Group Limited. All rights reserved.

This document is for information only. Features and specifications are subject to change without notice. Technetix, the Technetix logo, Ingress Safe, Modem Safe and certain other marks and logos are trade marks or registered trade marks of Technetix Group Limited in the UK and certain other countries. Other brand and company names are trade marks of their respective owners. Technetix protects its technology and designs by registering patents, trade marks and designs in Europe and certain other countries.