

Copper price breaks 10,000 USD/ton, copper theft threatens quality of service

Aluminum RF coaxial cables – a real alternative to copper

“As copper is breaking the barrier of 10,000 dollars per ton, increasing threats on copper security make aluminum a must-consider alternative for all new RF coaxial cable deployment projects worldwide.”

Stéphane Klajzyngier, President, Radio Frequency Systems

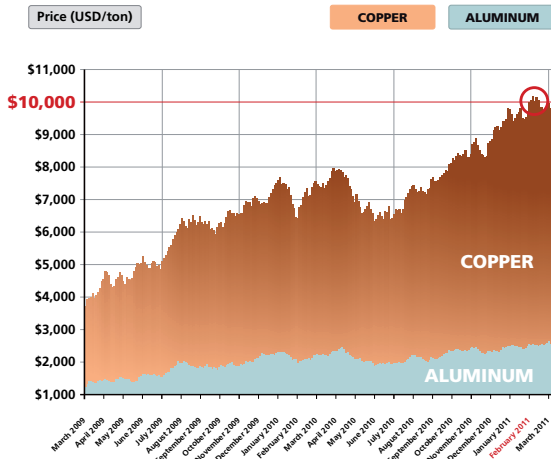


In recent years, the price of copper has been rising rapidly, finally breaking the 10,000 USD/ton barrier in 2011. RFS seeks to reduce the financial burden on its customers by offering an innovative alternative to copper transmission lines.

Theft of copper is a very real threat, and in many countries results in utility disruptions, service outages and other infrastructural damage. This type of occurrence is ever more frequent, as a direct result of copper's rising cost.

Aluminum is an increasingly attractive alternative to copper, with stable prices and predictable costs. RFS' CELLFLEX Lite aluminum RF Coaxial cables offer significant savings and competitive performance – and are completely backwards-compatible with RFS CELLFLEX copper cables.

**\$10,000/ton!
COPPER PRICE**



Evolution of the price of copper and aluminum
(source: London Metal Exchange)

Copper: at the top of the price charts

Browsing for “copper” on online news resources will lead you to web postings reporting the now well known fact that, in February 2011, copper hit the 10,000 USD/ton mark on the London Metal Exchange. The price of copper has tripled over the last two years; this sharp increase naturally leading to a rise in price of all copper-based components and products. Meanwhile, the price of aluminum remains much lower, and its growth curve is much flatter and more predictable than that of copper. Further enhancing the price advantage held by aluminum over copper is the difference in density

between the two metals, i.e. a ton of aluminum can be used to create more cable than a ton of copper.

The mobile industry is now getting used to this shocking economic reality, and started to adapt: some vendors have already announced price increases in their copper-based portfolios, and innovative companies such as RFS are actively promoting aluminum-based RF coaxial cables as a highly reliable, high performance, and highly cost-efficient alternative to copper (see the RFS press release on 16/11/2010: “RFS adapts to raw material evolution with plans to increase the price of its copper-brand cables and strengthen commercial focus on its aluminum-based cables”).



Threats on copper security: worse than on copper price

Back to the web, browsing now for "copper theft" on search engines in various languages, the copper crisis turns out to be of an even more critical dimension than the pricing crisis. Media worldwide are now indeed reporting on top security issues associated with thefts of copper, threatening all economic sectors, as well as the society at large.

UK media are reporting that "Copper thefts rise to an all-time high; UK Police warn that an epidemic of stolen cables is the biggest threat to Britain's security after terrorism" [[The Independent, Feb. 27, 2011](#)]; Italian media warn that "The theft of copper seems to have become a national sport" [[Il Giorno, Feb. 23, 2011](#)]; French media investigate "Copper thefts that paralyse TGV high-speed trains during hours are in the news" [[France 3, Feb. 28, 2011](#)]; Spanish media report the arrest of "A gang specialized in the theft of copper on the AVE high-speed railways between Madrid and Barcelona, who had stolen 600kg of copper valued 44k" [[El Periodico, Feb. 14, 2011](#)].

Copper thieves are attacking public services worldwide: in Germany, various copper thefts are daily reported through the [German Police Reports](#); while in the USA, copper thefts are attacking indistinctly [churches](#), [museums](#) and [schools](#). Even [cemeteries](#) and [utilities](#) are being attacked in Italy, and [hospitals](#) in the UK!

Attacks from copper thieves against some operators' networks have already started in various parts of the world, resulting in service outages; in an article from [Networkworld, Nov. 30, 2010](#) related to copper thieves' attacks on the AT&T network in the USA, FBI is quoted as stating "Copper thefts have increased dramatically since 2006; and they continue to disrupt the flow of electricity, telecommunications, transportation, water supply, heating, and security and emergency services, and present a risk to public safety and national security."

RFS CELLFLEX® Lite: Lightweight, light on your wallet... but heavyweight on performance!

RFS CELLFLEX® Lite corrugated aluminum cables are at the same time lightweight – meaning easier transportation and installation-, and light on your wallet!

But they also deliver superior performance in key areas, such as return loss, attenuation, corrosion resistance and durability in extreme temperatures. RFS CELLFLEX® Lite's performance attributes have been proven in numerous tests and were confirmed through a series of rigorous tests conducted by China Telecommunication Technology Labs (CTTL), China's most authoritative independent laboratories (see the [RFS press release on 19/07/2010](#): "Independent testing in China certifies the outstanding performance of RFS' corrugated aluminum cable").

RFS CELLFLEX® Lite is progressively the new preferred solution for RF feeder needs of major OEMs and Operators around the world. It is now being used



RFS OMNI-FIT™ connectors are designed for use with both RFS aluminum and copper cables

without any performance or reliability issues in many different regions. With a complete portfolio ranging from 1/2" to 1-5/8" corrugated cables, and high-performance connectors fully compatible with both CELLFLEX® copper and CELLFLEX® Lite aluminum cables, RFS provides users with a perfect match for the most complicated and demanding applications, every cable coming with a guarantee of reliability, performance and cost-efficiency from the most experienced and innovative cable manufacturer in the world.



RFS CELLFLEX® Lite: a complete range of corrugated aluminum RF feeder cables, fully compatible with the market-leading RFS CELLFLEX copper cable line.

Aluminum feeder cables: a must-consider alternative to copper

With solid performance, great reliability and excellent cost-efficiency, aluminum feeder cables, in particular the industry-leading CELLFLEX Lite RF feeder cabling solution from RFS have become a must-consider alternative for all new RF coaxial cable deployment projects worldwide in 2011, in particular for scheduled

For more information:

[RFS CELLFLEX®](#)
[and CELLFLEX® Lite](#)
[Transmission Lines brochure](#)
www.rfsworld.com

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