

CASE STUDY “RAILWAY”, PMA CABLE PROTECTION SOLUTIONS

Efficient plug-and-play solution using PMA cable protection

Safe and reliable communication solutions for rail traffic



Communication is paramount: PMA cable protection products from ABB are assisting HUBER+SUHNER with a smart cable protection solution for a project to replace the antennas in trains operated by Swiss Federal Railways (SBB).

Connecting devices wirelessly in rail applications. Several antennas per access point ensure wireless coverage throughout the train

Faultless, secure and reliable wireless communication is of paramount importance on today's densely used, networked rail system. In today's Internet age, a large amount of relevant and important information is transmitted immediately and in real time to ensure that trains run on time and to keep their passengers and crews fully informed. A wireless network for passengers and staff can be used for a variety of functions, such as on-board ticketing, timetable information, Internet access for passengers, and much else besides.

HUBER+SUHNER develops high-frequency and microwave components and systems for a wide range of rail applications. Its broad product portfolio includes a complete line of passive components, such as cables, connectors, cable assemblies, antennas, lightning protectors and resistive components.

Swiss Federal Railways (SBB), Switzerland's principal railway company, asked HUBER+SUHNER to replace the antennas in its FLIRT trains in a bid to improve real-time communication with the

trains. HUBER+SUHNER is equipping the SBB trains with its new SENCITY® omni-directional railway roof-top antennas. Designed to meet the special requirements of railway applications including high current and high voltage protection.

PMA cable protection products from ABB are making the task easier

HUBER+SUHNER has a variety of tried-and-tested antenna solutions. The company adopted PMA cable protection from ABB to install and protect the cables in its antenna solution.

The possibilities of the intended solution were discussed in detail at several working meetings with the specialists from PMA, and the optimal solution was found using various cable protection samples.

‘Great to find a perfect solution.’

Frank Brune, Project Manager at HUBER+SUHNER: “It was great to partner with PMA to find the perfect solution. The effective support provided by PMA



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01 SENCITY® Rail antenna with PMAFIX Pro fitting.

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02 PMAFIX Pro-NKNH fitting with HUBER+SUHNER antenna cabling.

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03 Installed PMA-BGPS conduit clamp, ready to accommodate for the XPCS conduit that will protect the cabling.

and the diversity of its cable protection range for rail applications meant we were able to offer SBB a compelling solution.”

PMA cable protection solutions are an important part of the new solution. Thanks to the XPCS conduit, BGPS conduit clamps and PMAFIX Pro-NKNH fittings, HUBER+SUHNER is able to guarantee stable and protected cabling for the antenna system.

PMA cable protection for railways – excellent ingress protection and fully compliant with firesafety standards

The PMAFIX Pro fitting is an easy-to-install fitting whose two-component sealing and locking element guarantees high ingress protection up to IP69.

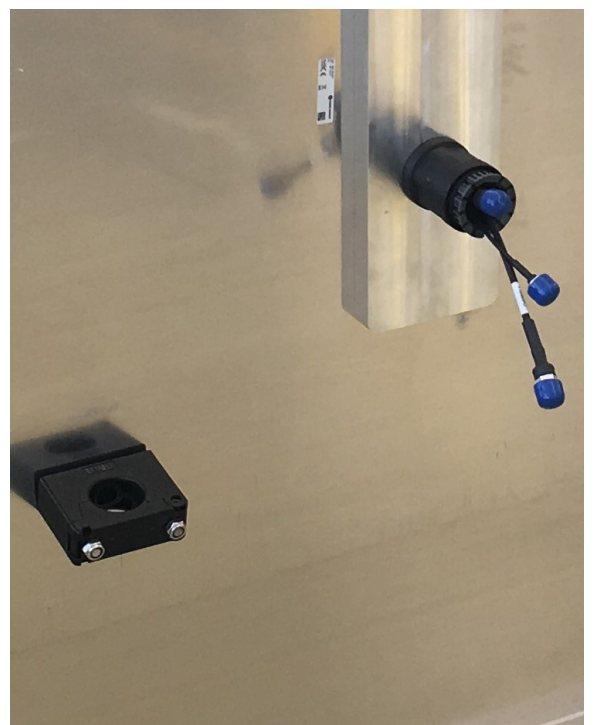
The innovative XPCS multilayer conduit complies with the EN45545-2 HL2 fire protection standard (requirements R22 and R23) and is thus suitable for use on trains of virtually all types and operating modes. The matching BGPS clamp ensures that the conduit remains securely in the right position in the long term.

“Successful applications and solutions”

Martin Gueller Sales Director PMA:
“HUBER + SUHNER and ABB’s PMA Cable Protection have a proven and long-standing partnership as suppliers of antenna system solutions. This is borne out by the many successful applications and solutions that benefit countless customers.”



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With the PMA cable protection product range, ABB offers an extensive portfolio of conduits, fittings and main accessories for a variety of markets and applications. The picture shows a PMAFIX Pro fitting with various PMA multilayer conduits.



ABB and HUBER+SUHNER

A long-standing, successful partnership in cable protection links ABB PMA Cable Protection with cable manufacturer HUBER+SUHNER. HUBER+SUHNER AG is a globally operating Swiss company that develops and produces components and system solutions for electrical and optical connectivity. HUBER+SUHNER uses PMA cable protection solutions in a variety of applications, such as rail technology or international fibre-optic solutions in countries including China, Poland and Switzerland.

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