

EXPEDITION FUTURE

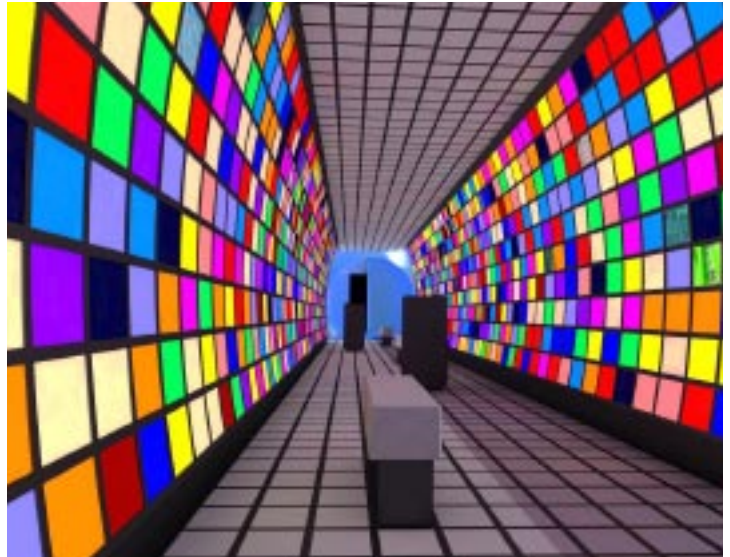
Since spring of this year, to mark the 60th anniversary of the Federal Republic of Germany, the exhibition train „Expedition Future“ has been touring a total of sixty German cities, in order to invite young and old visitors on a journey of discovery through the world of science.

Theme train Science and Technology

This is a mobile exhibition which looks back on 60 years of scientific research in Germany. The world of science and technology is presented in twelve theme railcars, with extensive multimedia features, hands-on exhibits and other interactive models. Current research trends are highlighted with projections into the future, dealing with global challenges

such a climate change, energy scarcity and demographic changes. The train is touring a total of 60 cities in the Federal Republic, stopping for 3 days at a time to offer visitors an insight into scientific and technical topics ranging from cosmology to medicine to agriculture to nutrition, etc. The trains were equipped in the Deutsche Bahn works in Wittenberge and Berlin-Grunewald. They have been fitted out with an elaborate interior architecture. The concept is based on the „Science Express“ which toured the Indian subcontinent from October 2007 to June 2008. The project „Expedition Future“ is under the management of the Max Planck Society and is funded by the Federal Ministry of Education and Research.





SMA onboard converters to supply the air conditioning system

SMA has delivered a total of 12 onboard converters to supply the railcar air conditioning systems and the multimedia equipment. The onboard converters are located in underfloor containers and are operated with 1,000 V, 16.7 Hz. The air conditioning system is supplied by an SMA onboard converter with an output of 10 kVA which is supplied via an integrated high voltage transformer. The internal power supply of the onboard converter is realized via the secondary side tap of the high voltage transformer. This has the advantage that no railcar battery is required for the internal supply of the device.

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Technical Data

Onboard converter for air conditioning systems

Input voltage	1.000 V, 16,7 Hz und 50 Hz
Output voltage	3 x 230 / 400 V, 50 Hz
Nominal power	10 kVA

Bottom left:

Theme world: nano and biological sciences
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Top left:

The future of humanity ...
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Top right:

... The factory of the future?
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