20 mW) for a small trade-off in accuracy. The diode power sensor is implemented with a doped planar GaAs diode in thinfilm hybrid technology. Temperature gradients of the diode are minimal, resulting in excellent zero stability.

As with all NRV sensors, the excellent characteristics of NRVZ55 and NRVZ15 are due to the use of a unique calibration concept. Calibration data are determined separately for each sensor as a function of frequency, power and temperature (each sensor contains a thermal detector) and saved in a built-in memory so that the power meter is ready for operation immediately after the sensor is connected.

Helmut Strecker

REFERENCES

Panorama

DAB multiplexer completes product line for digital audio broadcasting

In its DAB Multiplexer DM001 (FIG), Rohde & Schwarz rounds off its DAB product line and is thus the only supplier worldwide to offer a complete range of equipment from a single source to cover the entire DAB path from studio to transmitter.

DAB Multiplexer DM001 is fully compatible with DAB standard ETS300401 and is a central element of a DAB network. It combines the incoming audio and data channels to form the ensemble transport interface (ETI), which drives the subsequent COFDM encoders and thus the complete transmitter network.

DM001 is of modular design, so it can be configured to customer’s requirements. Up to twelve physical inputs are available that can be software-configured fast and easily for various data formats and protocols. DM001 can be equipped with one or two output modules allowing two independent ensembles to be generated by the same multiplexer for local services, for example.

DM001 supplies as standard an ETI signal at the NI layer (network independent layer to G.703) for transmission via satellite or directional radio to transmitter sites. For wired networks (e.g. ISDN) the NA layer (network adapted layer to G.704) is used. For this layer, automatic delay equalization, indispensable in DAB single-frequency networks, is performed at every transmitter site. Several DAB Multiplexers DM001 can be cascaded and thus used as pre-multiplexers. DM001 supports time-synchronized, dynamic input and ensemble reconfigurations. For this purpose it incorporates a realtime clock and can be locked to a reference time or clock.

All settings and configurations of the multiplexer are made from a PC by means of user software that is supplied with the multiplexer and runs under MS Windows. All manual entries are subjected to conformance testing so that erroneous entries are practically excluded. The software further allows the output of status information and any error events. An integrated scheduler enables automatic reconfiguration of the multiplexer at times defined by the user in day plans and in a schedule plan.

Rohde & Schwarz has already supplied large quantities of DAB multiplexers to German Telekom, and a large number of orders have been placed, for example by the Swiss PTT, the German WDR broadcasting corporation and Telstra Australia.

Peter H. Frank

Reader service card 153/16

DAB Multiplexer DM001 combines incoming audio and data channels to form ensemble transport interface for COFDM encoders. Photo 42 630