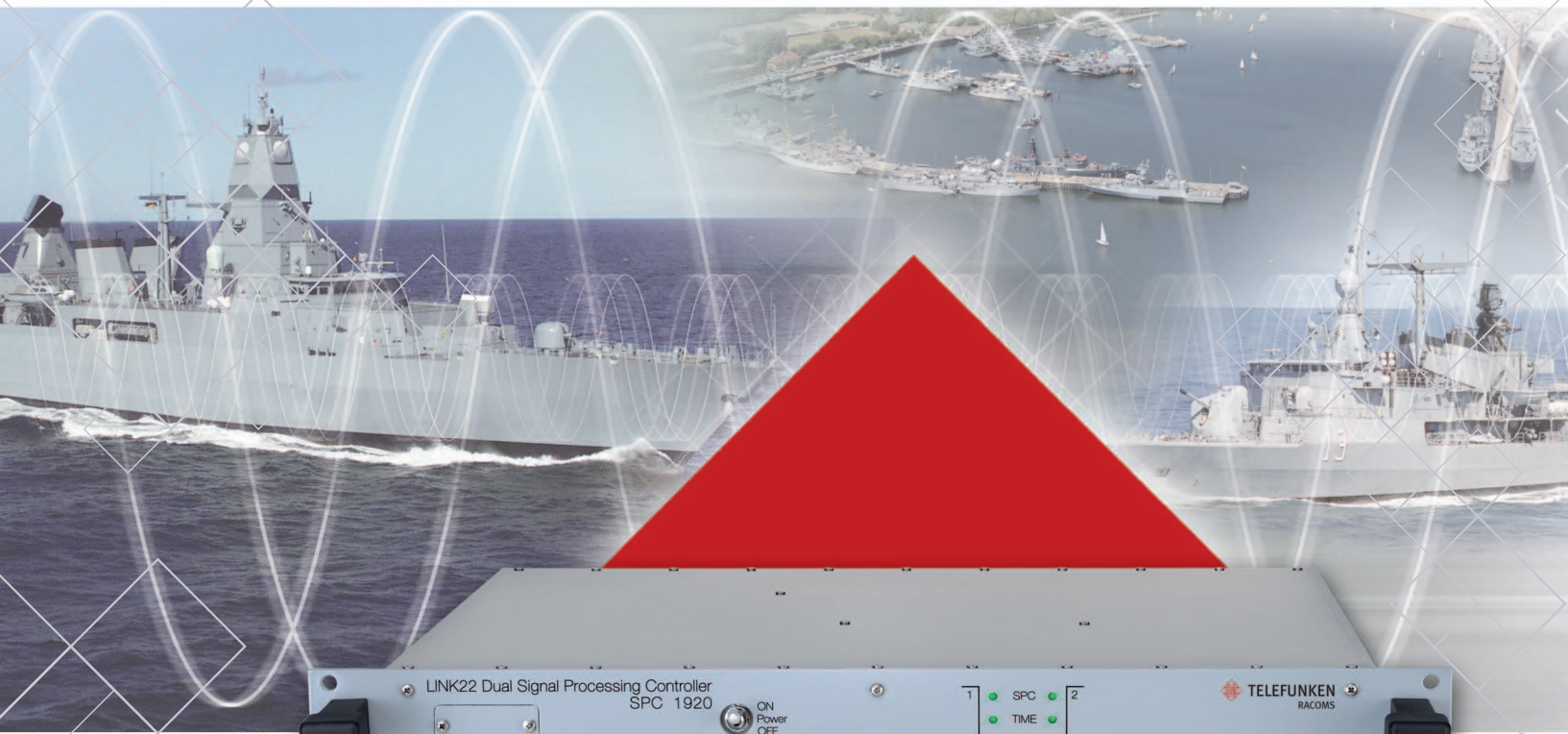




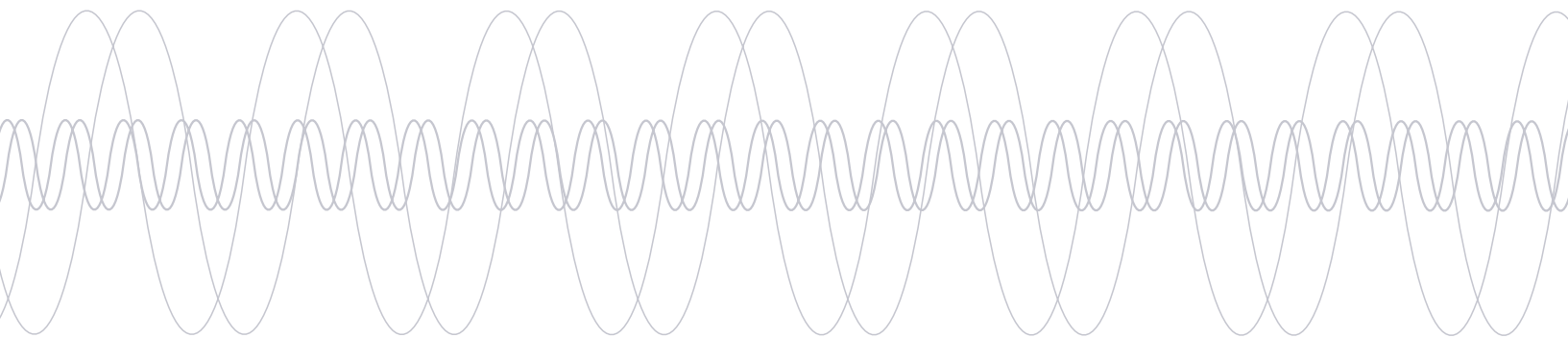
TELEFUNKEN
RACOMS

Defense



LINK22 Dual Signal Processing Controller SPC 1920

Advanced Performance for Next Generation Tactical Data Link



LINK22 Dual Signal Processing Controller SPC 1920

Enable operation by reliable communication. "NATO Improved Link Eleven" (NILE), designated LINK22 by NATO, replaces LINK11 and complements LINK16.

SPC 1920 provides dual Signal Processing Controller (SPC) functionality, with enhanced capabilities for long-range comms, high-speed comms, and JICO support.

Interoperability at Centre of Operation

Multi-national military operations gain situation assessment from allied interoperability. Coast guards enhance SAR, disaster relief, and homeland security by national interoperability.

NILE released specifications and NATO documentation apply to SPC 1920 implementation:

- ◆ NATO STANAG 4539 annex D
- ◆ NATO STANAG 4205
- ◆ NATO STANAG 4372
- ◆ NILE SPC Segment Specification
- ◆ NILE Interface Requirement Specification

Communication Media

- ◆ HF fixed frequency (HF FF) standard
- ◆ HF FF 1000 NM long-range improvement
- ◆ HF FF 9600 bps high-speed improvement
- ◆ UHF fixed frequency (UHF FF)
- ◆ UHF frequency hopping (with SATURN)

HF FF improvements are field-tested and provided to NILE for standardization.

SATURN interface operates without classified signals on ship installed digital switch boards.

Ship and System Integration

Non-recurring configuration is once at set-to-work. At in-service operation JICO controls SPC 1920 fully remotely – no man in the loop. SPC 1920 forwards radio related control to connected radios.

SPC 1920 supports all Havequick formats as well as IRIG-B for an accurate LINK22 TDMA scheme.

Navy personnel can update SPC 1920's firmware by front-located interface without dismounting.

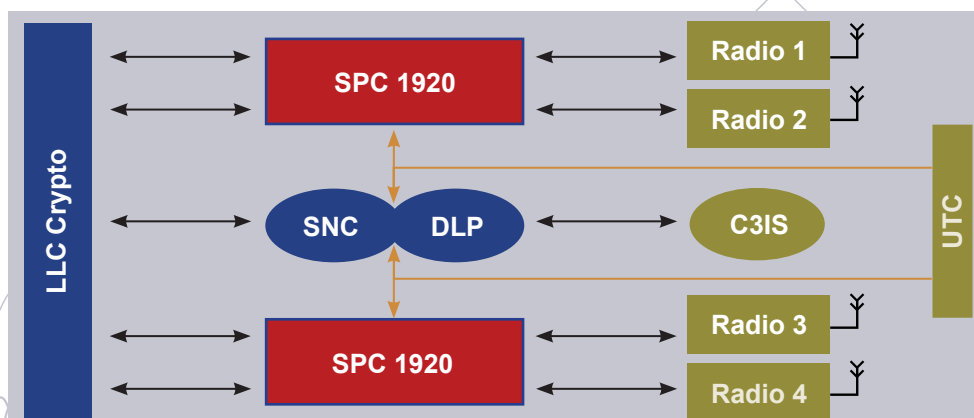
Interfaces

- ◆ LLC: RS-422 async. @ 38 kbps (adjustable)
- ◆ HF FF: 0 dBm (adjustable) balanced, 600 Ω
- ◆ UHF FF: NRZ (adjustable), balanced, 600 Ω
- ◆ UHF SATURN: RS-422 async. @ 115 kbps
- ◆ Radio keyline
- ◆ Radio Control: RS-232 or RS-422 async.
- ◆ UTC: RS-485 (time, PPS) Havequick or IRIG-B
- ◆ Service: Ethernet

Physical Characteristics

- ◆ 19 inch 1RU standard rack equipment
- ◆ Weight: approx. 5 kg (11 lb)
- ◆ Power supply: 100 - 240 V AC, 50/60/400 Hz

SPC 1920 in a Multi Network NILE Unit (NU)



SPC = Signal Processing Controller
SNC = System Network Controller
LLC = Link Level COMSEC
DLP = Data Link Processor
UTC = Universal Time Coordonné

C3IS = Communications, Command,
Control and Intelligence System

LINK22 devices
Platform devices
Data
Time

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