

## DATA LOGGER

# XORAYA N4000

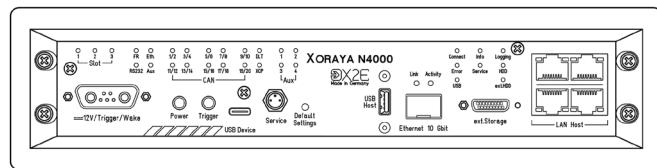
The XORAYA N4000 is a high-performance automotive data logger with customizable interfaces based on the Xilinx Zynq® Ultra-Scale+™.



## PRODUCT OVERVIEW

### Description

Compared to its predecessor (XORAYA Z7), the XORAYA N4000 has significantly more powerful hardware, allowing data to be recorded at up to 3 Gbit/s. In addition, the data logger now has an SFP+ interface as well as 8x Gbit Ethernet interfaces and a hermetically sealed active cooling system as standard.



### Product Highlights

- ✓ High-performance automotive data logger
- ✓ Up to 3 Gbit/s recording speed
- ✓ Individual configuration of logging interfaces possible
- ✓ Ethernet, LIN,CAN, PSI5, FlexRay and many more
- ✓ 480 GB internal & up to 8 TB external storage

### Technical Data

Further information can be found at the back of this data sheet.

Data Rate	Storage capacity	Timestamp	Temperature Range	Dimensions
Up to 3 Gbit/s	480 GB internal / up to 8 TB external	100 ns	-40 to +60 °C	70 x 255 x 207 mm

### Data Logging Interfaces

The XORAYA N4000 has, in addition to a standard interface configuration, 4 configurable slots for expanding the device with additional interfaces.

Number configurable slots	4
Available Interfaces	HS-CAN, CAN-FD, RS-232, FlexRay, LIN, Analog, Gbit-Ethernet

Configuration	HS-CAN / CAN-FD	RS-232	FlexRay	LIN	Analog	Gbit-Ethernet
R8F2C20Ge8	20	8	2	-	-	8
R8F2C20L7Ge8	20	8	2	7	-	8
R8F2C20L24Ge4	20	8	2	24	-	4
R8F2C40L24Ge4	40	8	2	24	-	4



## TECHNICAL DATA

All important technical data of the XORAYA N4000 at a glance:

Hardware	Processor / RAM	Quad ARM Cortex-A53 / 4 GB RAM / 256 MB Flash
	Data rate	Up to 3 Gbit/s
	Data storage	480 GB internal storage / up to 8 TB external storage (optional)
	Recording mode	Internal storage / external storage (ESU) / PC via Ethernet
	Timestamp	100 ns
	External operating voltage	6 to 32 V
	Current consumption	TBD
	Temperature range	-40 to +60 °C
	Dimensions	70 x 255 x 207 mm
	Weight	2,3 kg
	Other	Thermally sealed active cooling, real-time clock, supercap unit
Software	Operating system	Embedded Linux
	Storage formats	X2E Native, X2E ASCII, Carmen-Journal (V3.0), Wireshark PCAP, MOST OP2, MOST IMG, Vector BLF, Vector ASC, XAA for GNLog, DLT-Autosar, System Events, NMEA for GPS, Raw for RS-232, CSV for Analog/CCP, CSV for Signals, Video Extractor, MatLab signals, MDF Signals/Buslogging
	Software protocols	CCP/XCP, PLP, XLP
	Wake up by	CAN, FlexRay, RS-232, LIN, PSI5, wakeline or trigger
	Configuration software	XORAYA Suite, XORAYA WebGUI and XORAYA SDK for Windows & Linux
	Other	Automatic sleep mode
Interfaces	Pre-installed logging interfaces	20x HS-CAN / CAN-FD, 2x FlexRay, 8x RS-232, 4x Gbit-Ethernet
	Available slots & interfaces	4 additional slots (one interface module per slot)  Slots 1-3: 7x LIN / 4x CAN-FD / 4x PSI5 / 2x FlexRay / 8x RS-232 / 6x Analog Slot 4: 24x LIN / 4x Gbit-Ethernet
	Non-logging interfaces	1x 12V/Trigger/Wake, 1x USB Host, 4x LAN Host, 1x Device, 1x SFP+

