



LMF2FE+Rec+LEMO

General

The DATaRec 4 Series represents a total modular data acquisition and signal conditioning concept which can be tailored to various applications. The DATaRec 4 Link Module is the central processing module and is used to create a single datastream from multiple signal interface subsystems.

Since the Link Module provides the time basis for the connected Signal Modules a high precision synchronisation of all signals is always guaranteed. Furthermore the Link Module controls the calibration, the phase alignment, and gives build in test (BIT) options for the whole system during setup of a new system configuration or normal operation. The modular design provides the basis to configure large multi channel systems as well as small systems for mobile applications. The DATaRec 4 Series is the result of a continuous and consequent development of data acquisition systems. Many years of expertise and experience in both the automotive as well as the flight test market have been the starting point for the development of the new family incorporating state of the art technology.

HS300-0100/0	LMF2FE
Module data rate	600 Mbit/s
Interface data rate	
Gbit Ethernet	max. 600 Mbit/s
IEEE1394b	max. 180 Mbit/s
USB 2.0	max. 80 Mbit/s <sup>1)</sup>
Operating mode	front end
HeimLink chains	2

HS300-0100/1	LMF2FE+REC
Module data rate	600 Mbit/s
Interface data rate	
Gbit Ethernet	max. 600 Mbit/s
IEEE1394b	max. 180 Mbit/s
USB 2.0	max. 80 Mbit/s <sup>1)</sup>
Operating mode	front end standalone recorder
HeimLink chains	2

HS300-0200/0	LMF4FE
Module data rate	600 Mbit/s
Interface data rate	
Gbit Ethernet	max. 600 Mbit/s
IEEE1394b	max. 180 Mbit/s
USB 2.0	max. 80 Mbit/s <sup>1)</sup>
Operating mode	front end
HeimLink chains	4

HS300-0120/0	LMF2FE+REC+LEMO
Module data rate	600 Mbit/s
Interface data rate	
Gbit Ethernet	max. 600 Mbit/s
IEEE1394b	max. 180 Mbit/s
USB 2.0	max. 80 Mbit/s <sup>1)</sup>
Operating mode	front end standalone recorder

# Technical Specification DATaRec 4 Link Modules Overview

HeimLink chains	2
External time	IRIG A, B, G; GPS
Contact remote interface	
Storage medium interface	

HeimLink chains	2
External time	IRIG A, B, G; GPS
LMF-Sync.-interface	Syn. of up to 3 LMFGSS Module

HS610-3001/1	LMFGSS
Module data rate	650 Mbit/s
Interface data rate	
Gbit Ethernet	max. 650 Mbit/s
IEEE1394b	max. 180 Mbit/s
USB 2.0	max. 80 Mbit/s <sup>1)</sup>
Operating mode	front end

Notes
Performance varies depending on the installation environment. The shown values were measured using an appropriately designed test system under nominal conditions of temperature, voltage, etc..
Performance is significantly influenced by storage medium type, host computer performance and load, used acquisition software and signal module configuration.
<sup>1)</sup> currently under development

## Applications



Miniature system  
Single module system with direct link to the PC via USB 2.0



Distributed data acquisition system  
Remotely located modules (up to 768 channels)



Compact system  
Centralized acquisition system with up to 768 channels



Distributed multi channel system  
Remotely located groups of modules (up to 768 channels)



GSS base system, up to six internal signal modules



Decentralized system  
Base system, module extender and external storage



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