



CrossFire GX ULTRA-RUGGED I/O-MODULE FOR HYDRAULICS CONTROL

CrossFire GX is a freely programmable I/O -controller and CANopen device for industrial vehicle applications. The I/O is configurable in software, meaning that it is easily adapted for different tasks in a control system.

The rugged design enables location close to

sensors and actuators, mitigating risks associated with long signal cabling. Constant current regulation on proportional outputs makes up for non-linearity in the hydraulics system, offering the operator a more predictable machine control behavior.

Turn for technical specifications »

CrossFire GX PRODUCT SPECIFICATIONS

KERNEL	
PROCESSOR	Infineon SAF-C167CR-LM 20 MHz
FLASH MEMORY	Application flash 8 MB Boot flash 8 MB
SRAM	4 MB
EEPROM	8 KB

HMI	
STATUS LED	Status, Power indicator LED Monitoring LED for each I/O connector
NODE ID	ID keying with 16 positions, 127 positions with SW

CANOPEN DEVICE SPECIFICS	
TYPE	CANopen slave, DS 401 profile
BIT RATE	Configurable, 20–1000 kbps
NODE ID	ID keying with 16 positions, 127 positions with SW
NODE STATES	Pre-operational, Operational and Stopped
SDO	All settings configurable by SDO's
PDO	Supports all transmission types, event timer and inhibit time. Dynamic mapping supported
NMT	Heartbeat producer and consumer
NODE	Guarding also supported

CONTROLLER SPECIFICS	
TYPE	IEC 61131-3 soft PLC
RUNTIME SOFTWARE	CODESYS

CAN	
CAN IN AND CAN OUT	Separate Can In and Can Out connectors. Bit-rate configurable 20–250 kbps. (1Mbit optional)

6 X ANALOG INPUTS (AI)	
AI DESCRIPTION	6 analog Inputs, with one current Output and one voltage Input in each
RANGES	Voltage input 0–5 V Current input 4–20 mA
RESOLUTION	10 bit

5 X DIGITAL INPUTS/DIGITAL OUTPUTS (DIO)	
DIO DESCRIPTION	Each DIO contains, - two I/O channels, each configurable as either digital input or digital output. - +24V sensor supply and GND
DIGITAL INPUT	High level > 12V, Internal pull down
DIGITAL OUTPUT	0/28V (machine power), Max 2A

8 X DIGITAL INPUTS/DIGITAL OUTPUTS/PWM OUTPUTS (DIOP)	
DIOP DESCRIPTION	Each DIOP contains, - two channels , each configurable as digital input, digital output or PWM output. - +24V sensor supply and GND
DIGITAL INPUT	High level > 12V, Internal pull down
DIGITAL OUTPUT	High side 0/28V (machine power), Max 2A
PWM OUTPUT	High side switched with current control on low side. 10 bit resolution. Max 2A. Ripple frequency and amplitude adjustable in SW

2 X ENCODER INPUT/DIGITAL INPUT/DIGITAL SINKING OUTPUT (EDIO)	
EDIO DESCRIPTION	Each EDIO contains, - two channels, each configurable as encoder input, digital input or digital output. - +24V sensor supply and two GND.
ENCODER INPUT	16 bit counter, 4 counts per cycle, Max frequency 10 KHz
DIGITAL INPUT	Internal pull up
DIGITAL OUTPUT	Low side, Max 2A

PROTECTION AND CONTROL	
SHORT CIRCUIT	All I/O are short circuit protected
SATUS FEEDBACK	On On/Off Outputs
EXCESS VOLTAGE	Low side, Max 2A

POWER	
VOLTAGE	24 VDC nominal, reversed polarity and load dump protection
MAX TOTAL CONSUMPTION	18 A

ENVIRONMENT	
IP CLASS	IP67
EMC CONFORMITY	ISO 14982 for emissions ISO 11452-2 for immunity
SHOCK	IEC 60068-2-27
TEMPERATURE RANGE (°C)	-40 to +70 (operating) -40 to +85 (storage)

ENCLOSURE	
HOUSING MATERIAL	Aluminum, silicon filled
CONNECTORS	DIN M12, 7/8" for power

SIZE AND WEIGHT	
W x H x D (mm)	226 x 226 x 41
WEIGHT (kg)	1.5

crosscontrol

AN ACTUANT COMPANY

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