

Extension xG18

Holding registers

v1.1

Register Address		Length	R/W	Data Type	Content	Bit Nr.	Category
DEC	HEX						
0	0x0000	1	RW	MixedBits	Group MasterWatchDog (MWD) Status		Advanced
					MWD Enable	0	
					MWD Reboot Detected	1	
1	0x0001	1	R	int16 / int	Temperature CH1		Basic
2	0x0002	1	R	int16 / int	Temperature CH2		Basic
3	0x0003	1	R	int16 / int	Temperature CH3		Basic
4	0x0004	1	R	int16 / int	Temperature CH4		Basic
5	0x0005	1	R	int16 / int	Temperature CH5		Basic
6	0x0006	1	R	int16 / int	Temperature CH6		Basic
7	0x0007	1	R	int16 / int	Temperature CH7		Basic
8	0x0008	1	R	int16 / int	Temperature CH8		Basic
9	0x0009	1	RW	MixedBits	Temperature validity		Advanced
					CH1	0	
					CH2	1	
					CH3	2	
					CH4	3	
					CH5	4	
					CH6	5	
					CH7	6	
					CH8	7	
1000	0x03E8	1	R	uint16 / uint	Firmware Version		Expert
1001	0x03E9	1	R	MixedBits	Number of I/Os		Advanced
					Number of DOs	0 - 7	
					Number of DIs	8 - 15	
1002	0x03EA	1	R	MixedBits	Number of peripherals		Advanced
					Number of internal RS485 lines	0 - 3	
					Number of AOs	4 - 7	
					Number of AIs	8 - 15	
1003	0x03EB	1	R	uint16 / uint	Firmware ID		Expert
1004	0x03EC	1	R	uint16 / uint	Hardware ID		Expert
1005	0x03ED	2	R	uint32 / uint	PCB Serial Number		Expert
1007	0x03EF	1		MixedBits	Reserved - Do Not Use		Expert
1008	0x03F0	1	RW	uint16 / uint	MasterWatchDog (MWD) Timeout (ms)		Advanced
1009	0x03F1	1	R	uint16 / uint	VRef of MCU		Expert
1010	0x03F2	1	RW	uint16 / uint	Measuring interval CH1 (seconds)		Basic
1011	0x03F3	1	RW	uint16 / uint	Measuring interval CH2 (seconds)		Basic
1012	0x03F4	1	RW	uint16 / uint	Measuring interval CH3 (seconds)		Basic
1013	0x03F5	1	RW	uint16 / uint	Measuring interval CH4 (seconds)		Basic
1014	0x03F6	1	RW	uint16 / uint	Measuring interval CH5 (seconds)		Basic
1015	0x03F7	1	RW	uint16 / uint	Measuring interval CH6 (seconds)		Basic
1016	0x03F8	1	RW	uint16 / uint	Measuring interval CH7 (seconds)		Basic
1017	0x03F9	1	RW	uint16 / uint	Measuring interval CH8 (seconds)		Basic
1018	0x03FA	1	RW	MixedBits	RS485 Configuration - see Description sheet		Basic
					Baud rate	0 - 12	
					Parity enable	13	
					Parity-0=Even, 1=Odd	14	
1019	0x03FB	1	RW	uint16 / uint	Modbus Address Configuration (1-254)		Basic

Register Address		R/W	Content	Category
DEC	HEX			
1000	0x03E8	RW	MWD reset indication	Advanced
1001	0x03E9		Reserved - Do Not Use	Reserved
1002	0x03EA	RW	Reset group MCU	Advanced
1003	0x03EB	RW	Save current configuration and use on startup	Advanced

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Description

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[Check out the Unipi Knowledge base for more information](#)

Firmware (re)programming tool - [fwserial]

Debian packages: [unipi-firmware-tools], [unipi-firmware6]

Byte/register order

Word	Endianness
16-bit	Big Endian (AB)
32-bit	Mid-Little Endian (CDAB)

Baud rate configuration

Value	Speed [bps]
11	2400
12	4800
13	9600
14	19200
15	38400
4097	57600
4098	115200

Default configuration/values

	Data	Value	Description
CH	Temperature	-32768	x0.01 (-327.68 °C)
	Temp. validity	0	Unconnected/faulty sens.
	Meas. interval	2	2 s
MWD	Timeout	5000	5 s
	Enable	0	OFF
RS485	Modbus address	15	-
	Configuration	14	19200 bps, 8N1