MODBUS REGISTER MAP QA-VI

REMARKS:

- **Modbus connections: A+ and B-;**
- **Modbus Register reference: with reference to the logical address, for ex. 40010, corresponds to physical address n°9 as per Modbus RTU standard;**
- **Modbus functions supported: 3 (Read multiple registers), 6 (Write single), 16 (Write multiple);**
- **Any changes made by dip-switch required to switch off the power supply.**

Register Name	Comment	Register type	R/W	Default Value	Range	Modbus Address
Machine ID	Machine ID	UNIT16	R	11		**40001**
Firmware ID	Firmware ID	UNIT16	R	0		**40002**
ID	Serial Number	UNIT16	R		0...65535	**40003 (MSW)** **40004 (LSW)**
Status	Status Register: **bit 0** = fail global, **bit 1** = alarm, **bit 2** = over range, **bit 3** = under range, **bit 4**= din status, **bit 5**=dout status, **bit 6** = fail hw, **bit 7**=fail log, **bit 8**=fail rtc, **bit 9**=fail eeprom, **bit 10**=fail sensor	UNIT16	R			**40005**
Input Value	Input Value Normalized	UNIT16	R		0...10000	**40006**
	NOT USED					**40007** **40008**
Output Value	Output Value (mV or uA)	UNIT16	R/W		0...65535	**40009**
Input Value	Input Value	FLOAT (MSW)	R			**40010** **40011**
	NOT USED					**40012** **40013**
	NOT USED					**40014** **40015**
	NOT USED					**40016** **40017**
	NOT USED					**40018** **40019**
Digital Output	Digital Output: bit 0= disabled/enabled	UNIT16	R/W			**40020**
Dip-switch status	DIPSW status: **bit 0-7**=dip switch status, pos 1=bit 8,..., pos 8=bit 1	UNIT16	R			**40021**
	NOT USED					**40022** **40023**
Analog input type	Analog Input type: value 0=Voltage, 1=Current		R/W	0	0...1	**40101**
	NOT USED					**40102**
Analog input filter	Temperature mode : **bit 0-1** = unit measure °C/°F, **bit 7-15** analog filter value					**40103**
	NOT USED					**40104**
	NOT USED					**40105**
Output Analog mode	Output Analog mode: **bit 0**=Voltage/Current, **bit 1-2**=analog input, frequency, period, totalizer, **bit 3** = fail ur, **bit 4** = fail or, **bit 5** = fail hw, **bit 6** = fail log, **bit 7** = fail rtc, **bit 8** = fail eeprom, **bit 9** = fail alarm, **bit 10-11** = 1 threshold greater/1 threshold less/2 thresholds external/2 thresholds inside, **bit 12**=Manual mode	UNIT16	R/W	0		**40106**

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Register Name	Comment	Register type	R/W	Default Value	Range	Modbus Address
Output Analog Input Begin scale	Output Analog Input Begin Scale	FLOAT (MSW)	R/W	0.0		**40107**
						40108
Output Analog Input End scale	Output Analog Input End Scale	FLOAT (MSW)	R/W	10000.0		**40109**
						40110
Output Analog Begin scale	Output Analog Begin Scale	UNIT16	R/W	0	0...65535	**40111**
Output Analog End scale	Output Analog End Scale	UNIT16	R/W	10000	0...65535	**40112**
Digital Output	Digital Output : **bit 0**=default value, **bit 1** =fail ur, **bit 2** = fail or, **bit 3** = fail hw, **bit 4** = fail log, **bit 5** = fail rtc, **bit 6** = fail eeprom, **bit 7** = fail alarm, **bit 8** = fail din, **bit 9** = din/din inv, **bit 10**=low/high	UNIT16	R/W	0		**40113**
Alarm Low Trip value	Alarm Low trip value	FLOAT (MSW)	R/W	0.0		**40114**
						40115
Alarm High Trip value	Alarm High trip value	FLOAT (MSW)	R/W	0.0		**40116**
						40117
Alarm Hysteresis value	Alarm Hysteresys value	FLOAT (MSW)	R/W	0.0		**40118**
						40119
Modbus Address	Modbus address +parity +stopbits : MSB Modbus address, **bit 0-1** =parity none/odd/even, **bit 2**=stop bits 1/2	UNIT16	R/W	256		**40120**
Modbus Baudrate	Modbus Baudrate : value 0=1200, 1=2400, 2=4800, 3=9600, 4=19200, 5=38400, 6=57600, 7=115200	UNIT16	R/W	3	0...7	**40121**
Log mode	Log mode : bit 0=disabled/enabled	UNIT16	R/W	0		**40122**
Log sample time	Log sample time (sec)	UNIT16	R/W	1	1...65535	**40123**
Log name	Log name 15 letters max	UNIT16	R/W	0		**40124**
Log name	Log name 15 letters max	UNIT16	R/W	0		**40125**
Log name	Log name 15 letters max	UNIT16	R/W	0		**40126**
Log name	Log name 15 letters max	UNIT16	R/W	0		**40127**
Log name	Log name 15 letters max	UNIT16	R/W	0		**40128**
Log name	Log name 15 letters max	UNIT16	R/W	0		**40129**
Log name	Log name 15 letters max	UNIT16	R/W	0		**40130**
Log name	Log name 15 letters max	UNIT16	R/W	0		**40131**
RTC Year	RTC Year	UNIT16	R/W		2000...2099	**41001**
RTC Month	RTC Month	UNIT16	R/W		1...12	**41002**
RTC Day	RTC Day	UNIT16	R/W		1...31	**41003**
RTC Hour	RTC Hour	UNIT16	R/W		1...23	**41004**
RTC Minute	RTC Minute	UNIT16	R/W		0...59	**41005**
RTC Second	RTC Second	UNIT16	R/W		0...59	**41006**
Command	Command : value 1=Reset, 2=Save Cfg to EEPROM, 3=Set Factory CFG	UNIT16	R/W			**42001**
Command 1	Command parameter 1	UNIT16	R/W			**42002**
Command 2	Command parameter 2	UNIT16	R/W			**42003**

Upgrade FIRMWARE

The QA-VI is designed to upgrade the firmware via the USB port using a standard pen drive where the file will be placed.
The firmware will allow you to implement the functionality of the card and correct any anomalies that may occur.
In order to upgrade the firmware simply, remove power from the module, insert the pen drive with the file, restore power, at this point the card will automatically discharge the file and update the firmware without altering the configuration loaded during programming.
During the update phase the LED light will be intermittent FAIL.