ADAM-6051 16-channel Digital I/O w/Counter Module

The ADAM-6051W is a high-density I/O module built-in a 10/100 based-T interface for seamless Ethernet connectivity. It provides 12 digital input, 2 digital output, and 2 counter (10 KHz) channels with 5000V_{RMS} Isolating protection. All of the Digital Input channels support input latch function for important signal handling. Mean while, these DI channels allows to be used as 1 KHz counter. Opposite to the intelligent DI functions, the Digital Output channels also support pulse output function.

ADAM-6051W



Figure 1: ADAM-6051W 16-channel Digital I/O w/Counter Module

ADAM-6051W Specification

- Channel: 16
- I/O type: 12DI / 2DO / 2Counter
- Digital Input: Dry Contact:

Logic level 0: Close to GND

Logic level 1: Open

Wet Contact:

- Logic level 0: +3 Vmax
- Logic level 1: +10 to 30 V
- Digital Output: Open Collector to 30 V, 200 mA max. load
- Optical Isolation: $5000V_{RMS}$
- Counter:
 - Maximum Count: 4,294,967,285(32 bit)
 - Input frequency: 0.3 ~ 1000 Hz max. (frequency mode), 5000 Hz max. (counter mode)
 - Isolation voltage: 2500 V_{RMS}
 - Mode: Counter (Up/Down, Bi-direction), Frequency
- Communication: Wireless LAN IEEE802.11b
- Power Consumption: 2 W (Typical)

Application Wiring



Figure 2: ADAM-6051W Digital Input (Wet Contact) Wiring



Figure 3: ADAM-6051W Digital Input (Wet Contact) Wiring



Figure 4: ADAM-6051W Digital Output and Counter Wiring

System Architecture



ADAM-6051W Configuration

Network Configuration

Step 1: Please open the ADAM-5000TCP-6000 utility software. The utility software will automatically scan the ADAM-6000 modules. Please wait for the ADAM-6051W being found by utility software.

Firmware Version: Ver 1.12 Slot Module Description
2 3 4 5 6 7

Step 2: Please go the "Network" page to change the IP address/Subnet Address/Default Gateway of ADAM-6051W module to be compatible with user's existing network and set the host idle time out value (the ADAM-6000 module can only accept 8 connection from host station. Any host station doesn't request the communication with this ADAM-6000 module over the time out setting, the connection of this host station will be released for the other stations).

Ethernet Mac Address: 00-d0-c9-01-01-02 IP Address: Link Speed: Image: Comparison of the second

press "Apply" to download the new IP address to ADAM-6051W module (the default password for the changing configuration is "00000000").

Please enter th	e PASSWORD(Max 8	Characters): *******	
		10 ¹	

Step 3 : Re-configuring the IP address of the configuration PC to be the original setting (compatible with user's existing network) then re-start the utility software. The software will automatically search the ADAM-6051W module again.

Step 4 : Go to the "Wireless" page to set the wireless LAN configuration.

ADAM-5000 TCP/6000 Utility Ve	r 2.36.30
IIII ADAM-5000TCP/6000 Utility Ve File Iool Setup Help I Solow I Setup (10.00.119) I HOST (10.0.051)- (Adam-6051\\ I Solow I Solo	r 2 36 30 Slot Information Network System RS-485/Modbus/CDM-WDT Data Stream/Event Trigger Change Password Firmware/Web Wireless Basic setting WEP Site survey Mode: Infrastructure Diagnostic Adhoc SSID: <any> ANY ANY Region: U.S.A. (1~11) Channel: 10 Basic rates: Auto</any>
	Cancel O Apply
	[

Please set the wireless LAN mode to be "Infrastructure" or "Adhoc" based on exact system architecture.

le [ool Setup Help → HOST (10.0.0119) → ∰ (10.0.051) - (Adam-6051% ⊕ ⊕ 6051W	Slot Information Network System RS-485/Modbus/COM-WDT Data Stream/Event Trigger Change Password Firmware/Web Wireless
	Basic rates: Auto
	Cancel O Apply

Please assign the SSID for the specific wireless AP to be connected with ADAM-6000W modules. User can place "ANY" key to let the ADAM-6000W modules to automatically search the existing wireless AP. Or key in the specific SSID to assign the dedicated AP (strongly recommending to set up the dedicated SSID, it can guarantee the communication of ADAM-6000W modules to be stable)

ADAM-5000TCP/6000 Utility Ve	r 2.36.30
ADAM-5000TCP/6000 Utility Ye ib Iool Setup Help Iool Setup Help	x 2.36.30 Slot Information Network System RS-485/Modbus/COM-WDT Data Stream/Event Trigger Change Password Firmware/Web Wireless Basic setting WEP Site survey Mode: Infrastructure ▼ Diagnostic Adhoc SSID: W/LAN ANY Region: U.S.A. (1~11) ▼ Channet: 10 Basic rates: Auto ▼
-	Cancel Apply

For assigning the dedicated wireless LAN AP, user can use the site survey function to check the existing AP in connection environment. Please go to the "Site Survey" page.

Basic setting	WEP	Site survey				1	
SSID	A	P's MAC or B	SSID	Ch Ty)e	WEP	Strength

Press "Scan" bottom to search the existing AP.

SSID	AP's MAC or BSSID	Ch	Туре	WEP	Strength
@wlan	02:D0:EA:E7:01:60	10	Ad hoc	No	69%
APIAG5F	00:90:4B:0B:14:7E	5	Infrastructure	No	57%
AdamSoft	00:0D:88:45:39:DE	1	Infrastructure	Yes	37%
SDWAP	00:C0:02:D2:04:06	7	Infrastructure	No	34%
Visitor	00:0B:85:04:39:FE	11	Infrastructure	Yes	26%
TTI	00:80:C8:03:3C:56	6	Infrastructure	Yes	19%
Employee-NF	00:0B:85:04:39:FF	11	Infrastructure	Yes	16%

Selecting the AP in the searching result table.

SSID	AP's MAC or BSSID	Ch	Туре	WEP	Strength
WLAN	02:D0:EA:E7:01:60	10	Ad hoc	No	69%
APIAG5F	00:90:4B:0B:14:7E	5	Infrastructure	No	57%
AdamSoft	00:0D:88:45:39:DE	1	Infrastructure	Yes	37%
SDWAP	00:C0:02:D2:04:06	7	Infrastructure	No	34%
Visitor	00:0B:85:04:39:FE	11	Infrastructure	Yes	26%
TTI	00:80:C8:03:3C:56	6	Infrastructure	Yes	19%
Employee-NF	00:0B:85:04:39:FF	11	Infrastructure	Yes	16%
		Ар	oly this config	S	can

Press "Apply" bottom to accept the AP to finish the set up action.



Please select the region for your area.

Setting the used channel, the channel number must be included in the channel segment of your region.

de Iool Setup Help	
e 🔮 HOST (10.0.0119) E 💆 (10.0.051) - (Adam-6051) E 🔮 6051W	Slot Information Network System R5:485/Modbus/COM-W/DT Data Stream/Event Trigger Change Password Firmware/Web Wireless Basic setting WEP Site survey Infrastructure Diagnostic Adhoc SSID: WLAN ANY Region: U.S.A. (1~11) Channel: Basic rates: Auto Image: Auto Image: Auto Image: Auto
	Cancel O Apply

Please select the basic rate for the communication bandwidth.

Slot Information Network System RS-485/Modbus/COM-WDT Data Stream/Event Trigger Change Password Firmware/Web Wireless Basic setting WEP Site survey Mode: Infrastructure Diagnostic Adhoc SSID: WLAN ANY Region: U.S.A. (1^11) Channet: 10 Basic rates: Muto Image: State S
X Cancel O Apply

Press the "Apply" bottom to finish the set up work.

Step 5 : Configure the WEP security setting. Please go to the WEP page in "Wireless" of utility software.

	in Li Sile si	urvey		
Use WEP:	Disable	-		
Key format:	Alphanumeric	· · · ·		
WEP key:	-			

If user want to use the WEP security function, please enable the WEP function in "User WEP" then select the Key format and key in the WEP key for this requirement.

Use WEP	Disable	•	
Key forma	t Disable 64 bits		
WEP key:			

Step 6 : Data Stream Configuration

In addition to TCP/IP communication protocol, ADAM-6000 supports UDP communication protocol to regularly broadcast data to specific host PCs.

Click the tab of Data Stream, then configure the broadcasting interval and the specific IP addresses which need to receive data from the specific ADAM-6000 I/O module. This UDP Data Stream function broadcasts up to 8 host PCs simultaneously, and the interval is user-defined from 50ms to 7 Days.

] 🔏 🔍 🗁 😹 🔙 ∲ HOST (10.0.0.119)	
È 🐓 (10.0.0.51) - (Adam-6051∨ È 😨 6051∨	Data Stream/Event Trigger Change Password Firmware/Web Wireless Slot Information Network System RS-485/Modbus/COM-WDT
	Firmware Version: Ver 1.12
	Slot Module Description
	2 3 4 5 6 7

Please Days: 0	Enter the data stre Hours:	aming interval: Minutes:	Seconds:	mSeconds	Update
To activ	ve hosts to accept	the stream dat	a:		
0: 🗖	255.255.255.255	Update	4: 🗖	255.255.255.255	Update
1: 🗖	255.255.255.255	Update	5: 🗖	255.255.255.255	Update
2: 🗖	255.255.255.255	Update	6: 🗖	255.255.255.255	Update
3: 🗖	255.255.255.255	Update	7: 🗖	255.255.255.255	Update

Data Stream Monitoring

After finishing the configuration of Data Stream, you can select the item "Monitor Data Stream" in the function bar or click icon to call up operation display as below Figure.

IP Address: 172.18.1.194	Port: 5168	Start Stop	
Address: 172.18.1.194 Receiving Stream Data: At AM 09:23.04 Count=0 At AM 09:23.05 Count=1 At AM 09:23.06 Count=2 At AM 09:23.08 Count=3 At AM 09:23.09 Count=4 At AM 09:23.10 Count=5 At AM 09:23.11 Count=6 At AM 09:23.12 Count=7 At AM 09:23.13 Count=8	Port j5168 HOST (172.18.1.194) ⊡ 6017 DO DATA:0000 CH00: Data:7fff CH01: Data:7fff CH02: Data:7fff CH03: Data:7fff CH04: Data:7fff CH05: Data:7fff CH05: Data:7fff CH05: Data:7fff CH05: Data:7fff CH05: Data:7fff CH05: Data:7fff	f Max:8bf9 Min:7fff f Max:8ae6 Min:7fff f Max:89c9 Min:7fff f Max:89c9 Min:7fff f Max:8136 Min:7fff f Max:064 Min:7fff f Max:064 Min:7fff f Max:064 Min:7fff	
	CH07: Data:7fff	f Max:8d17 Min:7fff 7fff Max:b82c Min:7fff	

Select the IP address of the ADAM-6000 you want to read data, then click "Start" button. The Utility software will begin to receive the stream data on this operation display.

Firmware/Web Page Configuration

Step 1 : Please go to the "Firmware/Web" configuration page

ADAM-5000TCP/6000 Utility Ver	: 2.36.30
<u>File T</u> ool <u>S</u> etup <u>H</u> elp	
Ele Iool Setup Help	Slot Information Network System RS-485/Modbus/COM-W/DT Data Stream/Event Trigger Change Password Firmware/Web Wireless Target IP: 1000051 Firmware: HTML File: JAR File:
<u>< </u>	

Step 2: The ADAM-6000W modules support the configurable web page feature. Users don't have to learn the Java language to write the Java program to make the customized web page. Users can use the utility software to easily configure the web page that you want. Please follow the below instruction to configure the web page inside ADAM-6000W modules.

Press the web page configuration bottom.

Image: ADAM-5000TCP/6000 Utility Vertice File Iool Setup Help Image: Adaptive Setup Image: Adaptive Setup Image: Adaptive Setup Image: Adaptive Setup	er 2,36.30
	Slot Information Network System RS-485/Modbus/COM-WDT Data Stream/Event Trigger Change Password Firmware/Web Wireless Target IP: 100051 Firmware: HTML File: JAR File:
<	

Key in the Tag Name of input channel.

			ADAI	M-6051	w We	eb Page)		
DI Gr	roup Msg				DO	Group Msg			
	Tag	Desc	Status	Log '0'		Tag	Desc	Statu	s Lo
1]	DI 0	DI Channel 0	ON	@	[1]	D0 0	DO Channel O	(DN 🤇
2]	DI 1	DI Channel 0	ON	Ø	[2]	D0 1	DO Channel 1		ом 🛛 🧕
3]	DI 2	DI Channel 0	ON	Ø					
4]	DI 3	DI Channel 0	ON	0					
5]	DI 4	DI Channel 0	ON	0					
6]	DI 5	DI Channel 0	ON	0					
7]	DI 6	DI Channel 0	ON	0					
8]	DI 7	DI Channel 0	ON	0					
9]	DI 8	DI Channel 0	ON	0	Cour	ter Group M	sa		
10]	DI 9	DI Channel 0	ON	0	200	Level	Description	Status	
	DI 10	DI Channel 0	ON	0	[1]	Count0	Counter 0	value1	times
11]	1000	DLCL	ON		[2]	Count1	Counter 1	value2	times

Key in the description of input channel

			ADAI	M-6051	N We	eb Page)			
DI G	roup Msg -				_ D0 I	Group Msg				
	Tag	Desc	Status	Log '0'		Tag	Desc	Statu	IS	Log '1
[1]	DIO	DI Channel 0	ON		[1]	D0 0	DO Channel O		DN	0
[2]	DI 1	DI Channel 0	ON		[2]	D0 1	D0 Channel 1		ON	Ó
[3]	DI 2	DI Channel 0	ON	9						
[4]	DI 3	DI Channel 0	ON							
[5]	DI 4	DI Channel 0	ON							
[6]	DI 5	DI Channel 0	ON							
[7]	DI 6	DI Channel 0	ON							
[8]	DI 7	DI Channel 0	ON							
	DI 8	DI Channel 0	ON	0	Cour	ter Group M	80			
[3]	In a	DI Channel 0	ON			Level	Description	Status		
[9] [10]	lora	A DECEMBER OF A DECEMBER OF A DEC				CountD	Counter 0	value1	time	
[9] [10] [11]	DI 10	DI Channel 0	ON		[1]	leouno	1	. more .	une	s

Press the label bottom to configure the label description of input channel.

			ADAM	-6051	N We	eb Page	•		
DI G	roup Msg -				DO	Group Msg			
	Tag	Desc	Status	Log '0'		Tag	Desc	Status	Log '1
[1]	DIO	DI Channel 0		0	[1]	D0 0	DO Channel 0	0	N 🚫
[2]	DI 1	DI Channel 0	ON	@	[2]	D0 1	D0 Channel 1	0	N 🚫
[3]	DI 2	DI Channel 0	ON	Ø					
[4]	DI 3	DI Channel 0	ON	Ø					
[5]	DI 4	DI Channel 0	ON	0					
[6]	DI 5	DI Channel 0	ON	Ø					
[7]	DI 6	DI Channel 0	ON	0					
[8]	DI 7	DI Channel 0	ON	0					
[9]	DI 8	DI Channel 0	ON	0	Cour	ter Group M	sa		
[10]	DI 9	DI Channel 0	ON	0		Level	Description	Status	
[11]	DI 10	DI Channel 0	ON	0	[1]	Count0	Counter 0	value1	times
ti d	DI 11	DI Chappel 0	ON		[2]	Count1	Counter 1	value2	times



Key in the Tag Name of output channel

			ADAI	M-6051	N We	eb Page)			
DI Gi	roup Msg -				D0	Group Msg				
	Tag	Desc	Status	Log '0'		Tag	Desc	Sta	tus	Log '1
[1]	DIO	DI Channel 0	ON	Q	[1]	D0 0	DO Channel 0		ON	0
[2]	DI 1	DI Channel 0	ON	Ø	[2]	D0 1	D0 Channel 1		ON	Ó
[3]	DI 2	DI Channel 0	ON	Ø						
[4]	DI 3	DI Channel 0	ON	0						
[5]	DI 4	DI Channel 0	ON	0						
[6]	DI 5	DI Channel 0	ON							
[7]	DI 6	DI Channel 0	ON	9						
[8]	DI 7	DI Channel 0	ON	Ø						
[9]	DI 8	DI Channel 0	ON	Q	Cour	ter Group M	sa			
[10]	DI 9	DI Channel 0	ON	9		Level	Description	Status		
[11]	DI 10	DI Channel 0	ON	0	[1]	Count0	Counter 0	value1	tim	es
[12]	DI 11	DI Channel 0	ON		[2]	Count1	Counter 1	value2	tim	es

Key in the description of output channel

			ADA	M-6051\	N We	eb Page	•			
DI Gr	roup Msg -				- DO	Group Msg				
	Tag	Desc	Status	Log '0'		Tag	Desc	Statu	s	Log '1'
[1]	DIO	DI Channel 0	ON		[1]	D0 0	DO Channel O		NC	Ø
[2]	DI 1	DI Channel 0	ON	9	[2]	D0 1	D0 Channel 1		DN	Ô
[3]	DI 2	DI Channel 0	ON							
[4]	DI 3	DI Channel 0	ON							
[5]	DI 4	DI Channel 0	ON	0						
[6]	DI 5	DI Channel 0	ON							
[7]	DI 6	DI Channel 0	ON							
[8]	DI 7	DI Channel 0	ON	0						
[9]	DI 8	DI Channel 0	ON		Cour	iter Group M	\$0			
[10]	DI 9	DI Channel 0	ON			Level	Description	Status		
[11]	DI 10	DI Channel 0	ON		[1]	Count0	Counter 0	value1	times	
[12]	DI 11	DI Channel 0	ON	0	[2]	Count1	Counter 1	value2	times	

Press the label bottom to configure the label description of output channel



			ADA	4-6051\	N We	b Page)		
DI Gr	roup Msg -				_ D0 (aroup Msg -			
	Tag	Desc	Status	Log '0'		Tag	Desc	Statu	is Log
[1]	DIO	DI Channel 0	ON	Ø	[1]	D0 0	DO Channel O		ON 🧔
[2]	DI 1	DI Channel 0	-			land (0 Channel 1		ON 🧔
[3]	DI 2	DI Channel 0	Java out	look desig	<u>n</u>		<u>×</u>		
[4]	DI 3	DI Channel 0	Looid						
[5]	DI 4	DI Channel 0							
[6]	DI 5	DI Channel 0	Logic	al '0': OFF					
[7]	DI 6	DI Channel 0							
[8]	DI 7	DI Channel 0		ОК	Car	ncel			
[9]	DI 8	DI Channel 0			Loup	ter laroun M	80		
[10]	DI 9	DI Channel 0	ON	0	Joan	Level	Description	Status	
[11]	DI 10	DI Channel 0	ON	0	[1]	Count0	Counter 0	value1	times
[12]	DI 11	DI Channel 0	ON	0	[2]	Count1	Counter 1	value2	times

Key in the Tag Name of counter channel

			ADA	M-6051	w We	eb Page	Э			
DI G	oup Msg					Group Msg				
	Tag	Desc	Status	Log '0'		Tag	Desc	Stat	us	Log '1
[1]	DIO	DI Channel 0	ON	<u> </u>	[1]	D0 0	DO Channel 0		ON	0
[2]	DI 1	DI Channel 0	ON	Ø	[2]	D0 1	DO Channel 1		ON	Ø
3]	DI 2	DI Channel 0	ON	0						
4]	DI 3	DI Channel 0	ON	0						
5]	DI 4	DI Channel 0	ON	0						
6]	DI 5	DI Channel 0	ON	0						
7]	DI 6	DI Channel 0	ON	0						
8]	DI 7	DI Channel 0	ON	0						
9]	DI 8	DI Channel 0	ON	0	Cour	iter Group M	Isa			
[10]	DI 9	DI Channel 0	ON	0		Level	Description	Status		
	DI 10	DI Channel 0	ON	0	[1]	Count0	Counter 0	value1	tim	es
11]			ON		1.21	Count1	Counter 1	value2	tim	

Key in the description of counter channel

DI Group Msg D0 Group Msg Tag Desc Status Log '0' [1] DI 0 DI Channel 0 DN [1] [2] DI 1 DI Channel 0 DN [2] DO 1 DO Channel 1 ON [3] DI 2 DI Channel 0 DN [4] [4] DO Channel 1 ON	Log '1
Tag Desc Status Log'0' Tag Desc Status [1] DI 0 DI Channel 0 ON ON [1] DO 0 DO Channel 0 ON [2] DI 1 DI Channel 0 ON ON [2] DO 1 DO Channel 1 ON [3] DI 2 DI Channel 0 ON ON<	ا' Log '1
[1] DI 0 DI Channel 0 ON (1) DO 0 DO Channel 0 OI [2] DI 1 DI Channel 0 ON (2) DO 1 DO Channel 1 OI [3] DI 2 DI Channel 0 ON (2) (2) DO 1 DO Channel 1 OI	
[2] DI 1 DI Channel 0 ON Q [2] D0 1 D0 Channel 1 OI [3] DI 2 DI Channel 0 ON Q Image: Control 1 OI	100
131 DI 2 DI Channel 0 ON 🧑	
The forest interest in the second sec	
[4] DI 3 DI Channel 0 ON 🧔	
[5] DI 4 DI Channel 0 ON 🧔	
[6] DI 5 DI Channel 0 ON 🧕	
[7] DI 6 DI Channel 0 ON 🧔	
[8] DI 7 DI Channel 0 ON 🥝	
[9] DI 8 DI Channel 0 ON 0	
[10] DI 9 DI Channel 0 ON ON Level Description Status	
ON ON Counter Group Msg [10] DI 9 DI Channel 0 ON Curve Counter Group Msg [11] DI 10 DI Channel 0 ON [1] [11] DI 10 DI Channel 0 ON [1]	times
[8] DI 7 DI Channel 0 ON Ø [9] DI 8 DI Channel 0 ON Ø	

Click the title position to configure the page title description

Java	a outlook	. design								
			ADA	M-6051	w we	eb Page)			
DI Gr	oup Msg -				- DO I	Group Msg -				
	Tag	Desc	Status	Log '0'		Tag	Desc	9	Status	Log "
1]	DIO	DI Channel 0	ON	Q	[1]	D0 0	DO Channel O		ON	0
2]	DI 1	DI Channel 0	ON	<u> </u>	[2]	D0 1	DO Channel 1		ON	Ø
3]	DI 2	DI Channel 0	ON	Ø						
4]	DI 3	DI Channel 0	ON	0						
5]	DI 4	DI Channel 0	ON	0						
6]	DI 5	DI Channel 0	ON	0						
7]	DI 6	DI Channel 0	ON	0						
8]	DI 7	DI Channel 0	ON	0						
9]	DI 8	DI Channel 0	ON	0	Cour	ter Group M	۶ Л			
[0]	DI 9	DI Channel 0	ON	0		Level	Description	Status		
11]	DI 10	DI Channel 0	ON	0	[1]	Count0	Counter 0	value1	tin	nes
12]	DI 11	DI Channel 0	ON		[2]	Count1	Counter 1	value2	tin	nes
				0	ĸ	1				
	Vieler								- 18	
-	nano s								- 4	\frown
1	1									- 1
	2								_	
	La	ption: AD	AM-6051V	/ Web	Page	•1				
										_
			[1			
			0	IK 👘		Cano	el			

Please press "OK" after finishing all of the web page configuration.

DI G	roup Msg -				- DO (aroup Msg				
	Tag	Desc	Status	Log '0'		Tag	Desc	Sta	tus	Log
[1]	DIO	DI Channel 0	ON	Ø	[1]	D0 0	DO Channel O		ON	
[2]	DI 1	DI Channel 0	ON	9	[2]	D0 1	D0 Channel 1		ON	0
[3]	DI 2	DI Channel 0	ON	Ø						
[4]	DI 3	DI Channel 0	ON							
[5]	DI 4	DI Channel 0	ON							
[6]	DI 5	DI Channel 0	ON	0						
[7]	DI 6	DI Channel 0	ON	0						
[8]	DI 7	DI Channel 0	ON							
[9]	DI 8	DI Channel 0	ON		Coun	ter Group M	Isn			
[10]	DI 9	DI Channel 0	ON			Level	Description	Status		
	DI 10	DI Channel 0	ON	0	[1]	Count0	Counter 0	value1	tin	ies
[11]			ON		VI.	Count1	Counter 1	value2	tin	

Press "Update" bottom to download the web page configuration into ADAM-6000W module. And system will save the configuration data as a file in C:\Programs\ADAM-5000TCP-6000 Utility\Program\Firmware\ADAM-6051W\ADAM6051W.Html

HOST (10.0.119) (10.0.051) - (Adam-6051W) B Stot Information Network System RS-485/Modbus/CDM-WDT Data Stream/Event Trigger Change Password Firmware/Web Wireless Target IP: 10.0.051 Firmware: HTML File: C:\Program Files\ADVANTECH\ADAM-5000TCP-6000 C	ADAM-5000TCP/6000 Utility Ver File Iool Setup Help II 💁 🌨 📻 🎆 🔙	- 2.36.30
	 → HOST (10.0.0.119) → ∰ (10.0.0.51) - (Adam-6051Vk ● ⊕ 6051W 	Slot Information Network System RS-485/Modbus/CDM-WDT Data Stream/Event Trigger Change Password Firmware/Web Wireless Target IP: 10.0.051 Firmware: HTML File: C:\Program Files\ADVANTECH\ADAM-5000TCP-6000 C C JAR File:

Confirm	
?	Download file(s) below? HTML: [C:\Program Files\ADVANTECH\ADAM-5000TCP-6000 Utility\Program\Firmware\ADAM6051W\ADAM6051W.htm]
	<u>Yes</u> <u>No</u>
	Information

Informa	tion 🔣
(i)	Html upgrade successful !
	COK

User can also retrieve the previous web page configuration file to download to ADAM-6000W Module.

e Iool Setup Help	
HOST(UO.0.119) HOST(UO.0.119) W(10.0.0.51) - [Adam-6051\v ⊕ 6051\v	Slot Information Network System RS-485/Modbus/CDM-WDT Data Stream/Event Trigger Change Password Firmware/Web Wireless Target IP: 100.0.51 Firmware: Image: Change Password Image: Change Password HTML File: C:\Program Files\ADVANTECH\ADAM-5000TCP-6000 Image: Change Password JAR File: Image: Change Password Image: Change Password Image: C:\Program Files\ADVANTECH\ADAM-5000TCP-6000 Image: Change Password Image: Change Password

Select the stored web page configuration file then press "Open"

開啓				? 🛛
搜尋位置①:	C ADAM6051 W	•	+ 🗈 💣	.
adam605	:1W			
檔案名種(N):	i		- 80	ജനി
檔案類刑(T)·	HTML file (* htm)			
ax X ± (1).	「以唯讀方式開啓(R)		J <u>(</u>	<u>1114</u>

Follow the above action to download the selected file into ADAM-6000W module.

Firmware Update

Step 1 : Press the browse bottom of firmware

ADAM-5000TCP/6000 Utility Ye	r 2.36.30
<u>File Tool Setup H</u> elp	
Image: ADAM-5000 (CE//6000 (CE//6000 (CE//6000)) Ele Iool Setup Help Image: Addition (Color) Image: Addition (Color) Image: Addition (Color) Image: Additity (Color) Image: Additity (Co	Slot Information Network System BS-485/Modbus/CDM-WDT Data Stream/Event Trigger Change Password Firmware/Web Wireless Target IP: 1000051 Firmware: HTML File:

Step 2 : Select the firmware file to be downloaded

開啓	? 🛛
搜尋位置①: C ADAM6051W	· ← 🗈 💣
描案名稱(型): [3.DAM6051W] 檔案指型(T): Firmware files (*.bin)	開臀(①) ▼ 取消
□ 以唯讀方式開啓(R)	

Step 3 : Press "Update" bottom to finish the firmware update action

le Iool Setup Help	
E ∰ (10.0.51) - (Adam-6051\v B ∰ 6051W	Slot Information Network System RS-485/Modbus/CDM-WDT Data Stream/Event Trigger Change Password Firmware/Web Wireless
	Firmware: [C.\Program Files\ADVANTECH\ADAM-5000TCP-6000]

Input/Output Channel Configuration

Step 1: Please click on the "6051W" to go to the ADAM-6051W configuration main page.

ADAM-5000TCP/6000 Utility	¥er 2.36.3	0							
<u>File T</u> ool <u>S</u> etup <u>H</u> elp									
E -	ADAM-60 Locati 00001 00002 00003 00004 00005 00006	51W 16 Type Bit Bit Bit Bit Bit Bit	-ch isolate Value 1 1 1 1 1 1	ed digital 1/0 v Description DI CH:00 DI CH:01 DI CH:02 DI CH:03 DI CH:03 DI CH:04 DI CH:05	v/counter module D/I D/I D/I D/I D/I D/I D/I D/I D/I	Digital Value Output	Output: Communic Value(Hex DO 1	ation W : 1	DT
	00007 00008 00009 00010 00011 00012 00017	Bit Bit Bit Bit Bit Bit	1 1 0 0 0 0	DI CH:06 DI CH:07 DI CH:08 DI CH:09 DI CH:09 DI CH:10 DI CH:11 D0 CH:00	D/I D/I D/I D/I D/I D/I D/I D/I	Digital Input	Input: Value(Hex)	PI1	
	00018	Bit	0	DO CH:01	D/0		Q DI6 Q	OI 5	DI 4
							1 DI 10	DI 9 Ø	DI 8 P
						CNT: CH: CH:	D 0.0		Hz Hz
< >									
Reading data from 6051 successful ! cou	nt:00001								

Step 7: Please go to "Communication WDT" to set up the communication watchdog timer setting. This function is used for security protect, it means sometimes, noise or other reasons will cause the communication fail, and the host PC won't control the modules anymore, but the modules will keep the latest output status, and this status may cause dangerous, so while this situation happen, the communication WDT will detect it till timeout then reset the module and set the output to safety value to prevent the dangerous, user can set the safety value by themselves.

M M K K K K K K K K K K K K K K K K K K	-ADAM-6C Locati 00001 00002 00003 00006 00006 00006 00009 00000 00001 00011 00012 00017 00018	151₩16 Type Bit Bit Bit Bit Bit Bit Bit Bit Bit Bit	-ch isolat 1 1 1 1 1 1 1 1 1 1 0 0 0 0 0 0 0	ed digital 1/0 v Description DI CH:00 DI CH:03 DI CH:03 DI CH:03 DI CH:03 DI CH:04 DI CH:06 DI CH:06 DI CH:06 DI CH:07 DI CH:07 D	W/counter modul Mode D/l D/l D/l	le Digital O Value C F Enable Digital In Input Va DI 3 O DI 7 O DI 7 O DI 7 O CH1 CH2	In DOQ I followiny Upd Upd Upd Ulue(Hex): DI 2 Q DI 6 Q DI 6 Q DI 10 Q	DI1 V DI5 V DI9 V	DT value On DO1 DI 0 Q DI 0 Q DI 4 Q DI 8 Q Hz Hz

Step 3 : Please click on "DO:XX" to access the digital output channel configuration page. The digital output channel of ADAM-6051W can be configured as typical DO output, pulse output, DO with LO to Hi delay or DO with Hi to LO delay:

ADAM-5000TCP/6000 Utility 74 le Iool Setup Help	er 2.36.30
HOST (10.0.0.119)	ADAM-6051W D0:0 Digital Output Mode Setting: Mode Selecting: C D/O C Pulse Output C Lo to Hi Delay C Hi to Lo Delay
- ♀ D102 - ♀ D103 - ♀ D104 - ♀ D106 - ♀ D106 - ♀ D106 - ♀ D107 - ♀ D108 - ♀ D108 - ♀ D109 - ♀ D110	D/D'Mode
CNT:01	

For typical DO setting :

For Pulse Output setting :

ADAM-5000TCP/6000 Utility 7	er 2.36.30
File Iool Setup Help	
	ADAM-6051W D0:0 Digital Output Mode Setting: Mode Selecting: C D/O C Pulse Output C Lo to Hi Delay C Hi to Lo Delay
Q D:02 D:03 D:04 D:05 D:06 D:06 D:07 D:08 D:09 D:10 Q D:10	Please clicking 'Update' button to set as 'Pulse output' Mode
CNT:00	t∑ Update

For "Lo to Hi delay" and "Hi to Lo delay" function :

Bit Tool Setup Setu Image: Application of the set of the	ADAM-5000TCP/6000 Utility	7er 2.36.30
ADAM-5001 (Clubol 15) Adam-605(W 00.0 Color Hilder) A	<u>File I</u> ool <u>S</u> etup <u>H</u> elp	
Image: State of the state		
ADAM-5000TCP2/6000 Unity Ver 2.36.30 Del Tool Setup Belp Mode Setup Mode Setup Del Tool Setup Del To	Host (10.0.0119) B ← (10.0.051) · (Adam 6051) C → (0.0.051) C → (0.0.051) C → (0.0.051) C → (0.0.01) C → (0	ADAM-6051W D0:0 Digital Output Mode Setting: Mode Setting: D/0 C Pulse Output C Loto Hi Delay C Hi to Lo Delay Please clicking Update' button to set as 'L0 to HI Delay' Mode
Image: Construction of the section of the sectio	K	
Image: Section with the setting: Image: Secting:	Image: ADAM-5000 TCP/6000 Unity File Iool Setup Help Image: ADAM-5000 CCP/6000 Unity Image: ADAM-5000 TCP/6000 Unity File Image: ADAM-5000 TCP/6000 Unity	Yer 2.36.30
Image: Construction of the set of t	ADAM-5000 TCP/6000 Ubility Eile Iool Setup Help Solo Setup Help Host (10.0.0119) Host (10.0.0119) Solo Setup (10.0.0119) Solo Setup (10.0.0119)	Yer 2.36.30
Image: Second secon	Image: ADAM-5000TCP/6000 Ublity Eile Iool Setup Help Image: ADAM-5000TCP/6000 Ublity Image: ADAM-5000 Ublity	Ver 2.36.30
Please clicking 'Update' button to set as 'HI to LO Delay' Mode D1:05 D1:05 D1:07 D1:09 D1:09 D1:11 CNT:00 CNT:01 Please clicking 'Update' button to set as 'HI to LO Delay' Mode LD Delay' Mo	ADAM-5000TCP/6000 Ublity File Iool Setup Help Most from Help HOST (10.00.119) (10.00.51) - (Adam-6051). Software Obstantian Doton Doton Doton Doton Doton	ADAM-6051W D0:0 Digital Output Mode Setting: Mode Selecting: C D/0 C Pulse Output C Lo to Hi Delay C Hi to Lo Delay
DI:11 CNT:00 CNT:01	ADAM-5000TCP/6000 Ublity File Icol Setup Help Image: Setup H	ADAM-6051W D0.0 Digital Output Mode Setting: Mode Selecting: C D/0 C Pulse Output C Lo to Hi Delay C Hi to Lo Delay
	ADAM-5000TCP/6000 Utility File Lool Setup Help Image: Setup Help Image: Setup Help Image: Setup Hold Image: Setup Help Image: Setup Help Image: Setup Help Image: Setup Hold Image: Setup Help Image:	ADAM-6051W D0:0 Digital Dutput Mode Setting: Mode Selecting: C D/0 C Pulse Dutput C Lo to Hi Delay C Hi to Lo Delay Please clicking 'Update' button to set as 'HI to L0 Delay' Mode
	ADAM-5000 TC P/6000 Utility Ele Lool Setup Ele Image: Setup Image: Setup Image: Setup Image: Setup Image: Setup Image: Setup Ima	ADAM-6051W D0:0 Digital Output Mode Setting: Mode Selecting: C D/0 C Pulse Output C Lo to Hi Delay C Hi to Lo Delay Please clicking "Update" button to set as "Hi to LO Delay' Mode
	ADAM-5000TCP/6000 Utility Eve Lool Setup Eve Image: Setup Image: Setup Image: Setup Image: Setup Image: Setup Image: Setup Image	Ver 2.36.30
	Image: ADAM-5000TCP/6000 Ublity File Iool Setup Help Image: Addition of the setup Image: Addition of the setup Image: Addition of the setup Image: Addition of the setup Image: Addition of the setup Image: Addition of the setup Image: Addition of the setup Image: Addition of the setup Image: Addition of the setup Image: Addition of the setup Image: Addition of the setup Image: Addition of the setup	Ver 2.36.30 ADAM-6051W D0:0 Digital Output Mode Setting: Mode Setecting: C D/0 Pulse Output C D/0 Pulse Output Please clicking 'Update' button to set as 'HI to LO Delay' Mode Image: Distribution to set as 'HI to LO Delay' Mode
	ADAM-5000TCP/6000 Utility File Lool Setup Help Image: Setup Help Image: Setup Help Image: Setup Decol Image: Setup Help Ima	Ver 2.36.30 ADAM-6051W D0:0 Digital Output Mode Setting: Mode Setecting: C D/0 Pulse Output C D/0 Pulse Output Please clicking 'Update' button to set as 'HI to L0 Delay' Mode Image: Clicking 'Update' button to set as 'HI to L0 Delay' Mode
	ADAM-5000TCP/6000 Utility Ele Lool Setup Help Image: Setup Help Image: Setup Help Image: Setup Help Help Image: Setup Image: Setup Help Image: Setup Help Image: Setup Help Image: Setup Help Image: Setup Help Image: Setup Help Image: Setup Help Help Help Image: Setup Help Help Help Image: Setup	ADAM-6051W D0:0 Digital Dutput Mode Setting: Mode Selecting: C D/0 C Pulse Dutput C Lo to Hi Delay Fito Lo Delay Please clicking 'Update' button to set as 'HI to L0 Delay' Mode
	ADAM-5000TCP/6000 Utility Ele Lool Setup Help → → → → → → → → → → → → → → → → → → →	ADAM-6051W D0:0 Digital Output Mode Setting: Mode Selecting: C D/0 Pulse Output Please clicking 'Update' button to set as 'HI to L0 Delay' Mode Image: Setting: Image: Setting: Digital Output Digital Output Mode Setting: Image: Setting: Setting: Image: Setting:

Step 4 : Please click on "DI:XX" to access the digital input configuration page. The digital input channel of ADAM-6068 supports typical DI, counter, frequency, Lo to Hi Latch and Hi to Lo Latch.

For typical DI setting :

jle <u>I</u> ool Setup <u>H</u> elp		
HDST (10.0.0.119) (10.0.0.51) - (Adam-6051W (0.0.051) - (Adam-6051W (0.000 (0.001 (0.001 (0.001 (0.001 (0.001 (0.001 (0.001 (0.001 (0.001 (0.001	ADAM-6051W DI:0 Digital Input Config Mode Selecting © DI © Counter © Frequency © Lo to Hi Latch © Hi to Lo Latch	
0 0.02 0 D.03 0 D.04 0 D.05 0 D.06 0 D.07 0 D.08 0 D.09 0 D.09 0 D.09 0 D.09 0 D.101 0 D.111 0 D.111 0 D.111	D/l'Mode	
CNT:01		

For Counter setting :

ADAM-5000TCP/6000 Utility V	er 2.36.30
File <u>I</u> ool <u>S</u> etup <u>H</u> elp	
HOST (10.00.119) HOST (10.00.119) Contemporation of the second of the	ADAM-6051W DI:0 Digital Input Config: Mode Selecting DI Counter Frequency C Lo to Hi Latch C Hi to Lo Latch To invert signal Please clicking 'Update' button to set as 'Counter' Mode

For Frequency setting :

The Lool Setup Help	fer 2 36.30
HOST (10.0.0119) HOST (10.0.0119) Control (10.0.0	ADAM-6051W DI:0 Digital Input Config: Mode Selecting: O DI C Counter Frequency C Lo to Hi Latch C Hi to Lo Latch F To invert signal Please clicking Update' button to set as Frequency' Mode Update Update

For "Lo to Hi Latch" and "Hi to Lo Latch" setting :

the second s	r 2.36.30	
<u>File T</u> ool <u>S</u> etup <u>H</u> elp		
HUS 11 (10.00.11) → ♥ HUS 11 (10.00.11) → ♥ (10.00.51) - (Adam-6051) → ♥ 00.00 → ♥ 00.00 → ♥ 00.00 → ♥ 00.00 → ♥ 00.00 → ♥ 00.02 → ♥ 00.03 → ♥ 00.05 → ♥	ADAM-6051W DI:0 Digital Input Config: Mode Selecting: DI Counter C Frequency C Loto Hi Latch C Hi to Lo Latch To invest signal Please clicking 'Update' button to set as 'L0 to HI Latch' Mode	
Imada Address File Icol Setup Help Image: Setup Kelp	r 2 36.30	
Image: ADAM-5000TCP/6000 Utility Verifie Eile Iool Setup Help Image: Additional Setup Help Image: Additional Setup Image: Additional Setup Image: Additional Setup	r 2.36.30	
ADAM-5000TCP/6000 Utility Ve Ele Iool Setup Help Image: Setup Help Image: Setup Help Image: Setup Help Image: Setup Help Image: HOST (10.0.0.119) Help Image: Setup Help Image: HOST (10.0.0.119) Help Image: Setup Fille	r 2.36.30	
ADAM-5000TCP/6000 Utility Ve Ele Icol Setup Help Image: Setup Help Image: Setup Help Image: Setup Help Image: Setup Help Image: Setup Help Image: Setup Help Image: Setup HoST (10.0.0119) Image: Setup Help Image: Setup HOST (10.0.051) (Adam-6051) Image: Setup Image: Setup Image: Setup Image: Setup Image: Setup Image: Setup Image: Setup Image: Setup Image: Setup	r 2.36.30	
ADAM-5000TCP/6000 Utility Ve Ele Iool Setup Help Most fille Most fille Most fille Most fille HOST (10.00.119) Most fille Most fille Most fille Most fille Gost fille Most fille Most fille Most fille Gost fille Most fille Most fille Most fille Most fille Most fille Most fille Most fille<	ADAM-6051W DI:0 Digital Input Config. Mode Selecting: C DI C Counter C Frequency C Lo to Hi Latch C Hi to Lo Latch	
Image: ADAM-5000TC2/5000 Utility Ve Eile Icol Setup Help Image: Addition of the setup Image: Addition of the setup Image: Additicon Image: Addition of the setup	ADAM-6051W DI:0 Digital Input Config: Mode Selecting: C DI C Counter C Frequency C Lo to Hi Latch C Hi to Lo Latch To invert signal	
ADAM-5000TCP/6000 Utility Ve Ede Icol Setup Help Mos Mos Mos Mos HOST (10.0.0.119) Mos Ede Ede Mos Mos Mos Mos Ede Mos Mos Mos Mos Mos Mos Mos <	ADAM-6051W DI:0 Digital Input Config: Mode Selecting: C DI C Counter C Frequency C Lo to Hi Latch C Hi to Lo Latch To invert signal Please clicking Update' button to set as 'HI to LO Latch' Mode	
Image: ADAM-5000TCP/6000 Utility Ve Pile Iool Setup Help Image: ADAM-5000 Utility Ve Image: ADAM-50	ADAM-6051W DI:D Digital Input Config. Mode Selecting. DI Counter Frequency Lo to Hi Latch Hi to Lo Latch Please clicking 'Update' button to set as 'HI to LO Latch' Mode	

Step 4 : Please click on "CNT:XX" to access the counter channel configuration page.

For Counter setting :

: Iool ∑etup Help	ADAM-6051W/ CNT:0
	Counter Config Mode Selecting: C DI C Counter C Frequency C Lo to Hi Latch C Hi to Lo Latch
Image: Constraint of the second sec	Please clicking 'Update' button to set as 'Counter' Mode
- CNT:00 - CNT:01	

For Frequency Mode setting :

ile <u>I</u> ool <u>S</u> etup <u>H</u> elp	
HOST (100.0119) → (100.011) - (Adam-6051)× → 6051W → 00:00 → 00:01 → 01:00 → 01:01 → 01:01 → 01:01 → 01:02 → 01:03 → 01:04 → 01:05 → 01:06 → 01:07 ↓ 01:08 ↓ 01:11 ↓ CNT:00 ↓ CNT:01	ADAM-6051W CNT:0 Counter Config. Mode Selecting: C D1 C Counter Frequency: C Lo to Hi Latch C Hi to Lo Latch T or invert signal Please clicking 'Update' button to set as 'Frequency' Mode

Appendix : Adam-6000W Mode Setting



<u>switch</u>

Mode 1 (Normal Mode): In this mode, you can use Utility to configure module to Infrastructure or Ad hoc mode.

Mode 2 (Diagnostic Mode): The purpose of this mode is used to recover the Adam-6000W module from error state. User can switch module to diagnostic Infrastructure/Ad hoc mode that has temporary wireless setting and default IP, subnet mask. Therefore, user can re-configure the wireless setting when module's communication is dead. (*Note: the temporary wireless setting will be cleared after reboot to Normal mode)

Diagnostic-mode default settings:

Diagnostic Ad hoc mode setting:

Temporary SSID: WLAN Temporary Channel: 10 Temporary Wep: No IP: 10.0.0.1 Subnet mask: 255.0.0.0

Gateway: 0.0.0.0

Diagnostic Infrastructure mode setting:

Temporary SSID: <ANY> Temporary Channel: 10 Temporary Wep: No IP: 10.0.0.1 Subnet mask: 255.0.0.0 Gateway: 0.0.0.0

Assigning addresses	for the ADAM-6051W	Modules
---------------------	--------------------	----------------

\nearrow	ADDR 0X	СН	ITEM	Attribute	ADDR 4X	СН	ITEM	Attribute
	00001	0	DI	R	40001~40002	0	*Counter	R
	00002	1	DI	R	40003~40004	1	*Counter	R
	00003	2	DI	R	40005~40006	2	*Counter	R
	00004	3	DI	R	40007~40008	3	*Counter	R
	00005	4	DI	R	40009~40010	4	*Counter	R
	00006	5	DI	R	40011~40012	5	*Counter	R
	00007	6	DI	R	40013~40014	6	*Counter	R
	00008	7	DI	R	40015~40016	7	*Counter	R
	00009	8	DI	R	40017~40018	8	*Counter	R
	00010	9	DI	R	40019~40020	9	*Counter	R
	00011	10	DI	R	40021~40022	10	*Counter	R
	00012	11	DI	R	40023~40024	11	*Counter	R
	00013	12	DI	R	40025~40026	12	*Counter	R
	00014	13	DI	R	40027~40028	13	*Counter	R
	00017	0	DO	R/W	40029~40030	0	Pulse Output Low Level	R
	00018	1	DO	R/W	40031~40032	1	Pulse Output Low Level	R
	00033	0	Counter Start(1)/Stop(0)	R/W	40033~40034	0	Pulse Output High Level	R
	00034	0	Clear Counter(1)	R/W	40035~40036	1	Pulse Output High Level	R
	00035	0	Clear Overflow	R/W				
	00036	0	Latch Status/ Clear Status	R/W				
	00037	1	Counter Start(1)/Stop(0)	R/W	40037~40038	0	Set Absolute Pulse (0=Continue Mode)	R
	00038	1	Clear Counter(1)	R/W	40039~40040	1	Set Absolute Pulse (0=Continue Mode)	R
	00039	1	Clear Overflow	R/W				
	00040	1	Latch Status/ Clear Status	R/W				
	00041	2	Counter Start(1)/Stop(0)	R/W	40041~40042	0	Set Incremental Pulse	R
	00042	2	Clear Counter(1)	R/W	40043~40044	1	Set Incremental Pulse	R
	00043	2	Clear Overflow	R/W				
	00044	2	Latch Status/ Clear Status	R/W				

00045	3	Counter Start(1)/Stop(0)	R/W		
00046	3	Clear Counter(1)	R/W		
00047	3	Clear Overflow	R/W		
00048	3	Latch Status/ Clear Status	R/W		
00049	4	Counter Start(1)/Stop(0)	R/W		
00050	4	Clear Counter(1)	R/W		
00051	4	Clear Overflow	R/W		
00052	4	Latch Status/ Clear Status	R/W		
00053	5	Counter Start(1)/Stop(0)	R/W		
00054	5	Clear Counter(1)	R/W		
00055	5	Clear Overflow	R/W		
00056	5	Latch Status/ Clear Status	R/W		
00057	6	Counter Start(1)/Stop(0)	R/W		
00058	6	Clear Counter(1)	R/W		
00059	6	Clear Overflow	R/W		
00060	6	Latch Status/ Clear Status	R/W		
00051	7	Counter Start(1)/Stop(0)	R/W		
00062	7	Clear Counter(1)	R/W		
00063	7	Clear Overflow	R/W		
00064	7	Latch Status/ Clear Status	R/W		
00065	8	Counter Start(1)/Stop(0)	R/W		
00066	8	Clear Counter(1)	R/W		
00067	8	Clear Overflow	R/W		
00068	8	Latch Status/ Clear Status	R/W		
00069	9	Counter Start(1)/Stop(0)	R/W		
00070	9	Clear Counter(1)	R/W		
00071	9	Clear Overflow	R/W		
00072	9	Latch Status/ Clear Status	R/W		
00073	10	Counter Start(1)/Stop(0)	R/W		
00074	10	Clear Counter(1)	R/W		
00075	10	Clear Overflow	R/W		
00076	10	Latch Status/ Clear Status	R/W		

00077	11	Counter Start(1)/Stop(0)	R/W		
00078	11	Clear Counter(1)	R/W		
00079	11	Clear Overflow	R/W		
00080	11	Latch Status/ Clear Status	R/W		
00081	12	Counter Start(1)/Stop(0)	R/W		
00082	12	Clear Counter(1)	R/W		
00083	12	Clear Overflow	R/W		
00084	12	Latch Status/ Clear Status	R/W		
00085	13	Counter Start(1)/Stop(0)	R/W		
00086	13	Clear Counter(1)	R/W		
00087	13	Clear Overflow	R/W		
00088	13	Latch Status/ Clear Status	R/W		

*Note : How to retrieve the counter/frequency value on Modbus address mapping

Example :

Counter(dec) = (value of 40002) x 65536 + (value of 40001) Frequency(dec) = (value of 40001)/10 Hz This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna.

-Increase the separation between the equipment and receiver.

-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-Consult the dealer or an experienced radio/TV technician for help.

This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Any changes or modifications (including the antennas) made to this device that are not expressly approved by the manufacturer may void the user's authority to operate the equipment.

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

CE Declaration of Conformity

(€0984)

Is herewith confirmed to comply with the requirements set out in the Council Directive on the Approximation of the Laws of the Member States relating to Electromagnetic Compatibility (89/336/EEC), Low-voltage Directive (73/23/EEC) and the Amendment Directive (93/68/EEC), the procedures given in European Council Directive 99/5/EC and 89/3360EEC.

The equipment was passed. The test was performed according to the following European standards:

- EN 300 328 V.1.6.1 (2004-04)
- EN 301 489-1 V.1.4.1 (2002-04) / EN 301 489-17 V.1.2.1 (2002-04)
- EN 50371: 2002
- EN 60950: 2000