



# ELECTRONIC REGISTER PROGRAMMING USER MANUAL



## **INTRODUCTION**

Bermad's E-Register is an advanced state of the art technology suited for bulk, industrial, commercial and residential applications. The smart register combines encapsulated and weatherproof housing with a reliable and quality design improving accuracy and sensitivity, while increasing metering reliability. Within this user manual we will display the programming capabilities of the E-Register.

# NOTICE

The information in this document has been carefully checked and is considered reliable. No responsibility is assumed for inaccuracies. BERMAD reserves the right to introduce changes in its products to improve reliability, function or design. BERMAD does not assume any liability arising from the application or use of any of its products or any product described in this document, nor does it convey any license under its patent rights or the rights of others. This document contains proprietary information and may not be reproduced in any form without prior written consent of BERMAD. Copyright 2022 by BERMAD Evron, 2280800, Israel.

### TABLE OF CONTENTS

Introduction	1
Notice	1
Initial Setup	3
APP Operation	4
Register Programming	5
Programming by sequence	8
Special Configuration and Modification	13
Modifying Pulse Configuration	14
Modifying the Flow Units of Measurement	15
Appendixes	16
Appendix 1 - Pulse Table Index	16
Appendix 2 - Metric Pulse Volume	16
Appendix 3 - Cu.Ft Pulse Volume	17
Appendix 4 - Gallons Pulse Volume	18
Register Alerts	19
Reverse Flow Alert (5)	19
Low Battery Alert (6)	19

TABLE OF FIGURES	
Figure 1 - Gup Folder	3
Figure 2 - Installation File	3
Figure 3 - Installation Folder	4
Figure 4 - Initial Setup	4
Figure 5 - Connecting to E-Register	5
Figure 6 - Connected	6
Figure 7 - Reading Parameters	7
Figure 8 – Programming Sequence	8
Figure 9 - Sequencial pulse options	9
Figure 10 - Programming	10
Figure 11 - Part Number	11
Figure 12 - Special Programming	13
Figure 13 - Pulse Value Selection	14
Figure 14 - Flow Units	15
Figure 15 - Metric Pulse Table	16
Figure 16 - Cu. Ft Pulse Table	17
Figure 17 - Gallons Pulse Table	18



### **INITIAL SETUP**

- The GUP application requires a simple one step installation
- Please copy the GUP folder and paste it into the dedicated programming PC

	ocuments > Bermad > E-Register KP > GU	P_Bermad V1.1.7.0	ر 5	Search GUP_Bermad V1.1.7.0	
^	Name	Status	Date modified	Туре	Size
Quick access	log	0	06/02/2022 9:59	File folder	
Desktop 🖈	AccessDatabaseEngine	0	17/11/2021 16:42	Application	25,935 KB
Downloads 🖈	Bin.dll	0	05/05/2005 9:41	Application extension	28 KB
Documents 🖈	C1.Win.C1Command.4.dll	0	23/04/2012 17:34	Application extension	1,834 KB
Pictures 💉	C1.Win.C1Sizer.4.dll	0	13/04/2012 11:31	Application extension	129 KB
BE Electronic Re	DATA FOR GUP	0	06/02/2022 15:58	Microsoft Excel Work	114 KB
Desktop	📓 GeneralOptions	0	07/02/2022 11:33	Configuration settings	1 KB
Hebrew	🚔 GUP_Bermad	0	02/02/2022 16:34	Application	240 KB
Price List					



• From the GUP folder please double click the AccessDatabaseEngine file and follow the installation instructions

🕂 🕆 🛧 🔤 « Docu	ments > Bermad > E-Register KP > GL	JP_Bermad V1.1.7.0	Q Q ✓	Search GUP_Bermad V1.1.7.0	
^	Name	Status	Date modified	Туре	Size
Quick access	log	0	06/02/2022 9:59	File folder	
Desktop 📌	AccessDatabaseEngine	0	17/11/2021 16:42	Application	25,935 KB
Downloads 🖈	Bin.dll	0	05/05/2005 9:41	Application extension	28 KB
Documents 📌	C1.Win.C1Command.4.dll	0	23/04/2012 17:34	Application extension	1,834 KB
Pictures 🖈	C1.Win.C1Sizer.4.dll	0	13/04/2012 11:31	Application extension	129 KB
BE Electronic Re	DATA FOR GUP	0	06/02/2022 15:58	Microsoft Excel Work	114 KB
Desktop	GeneralOptions	0	07/02/2022 11:33	Configuration settings	1 KB
Hebrew	🍰 GUP_Bermad	0	02/02/2022 16:34	Application	240 KB
Price List					

Figure 2 - Installation File

- Once installation completed successfully, you are now ready to use the programing App
- Prior to initial operation connect ERRSINT003 programming toolkit to your local PC / laptop
- Your PC / laptop should recognize the ERRSINT003 as a new com port on the system



### **APP OPERATION**

Please open the GUP folder and Launch the GUP\_Bermad file

→ ~ ↑ <mark> </mark>	w Do	ocuments > Bermad > E-Register KP > G	UP_Bermad V1.1.7.0 >	v O p	Search GUP_Bermad V1.1.7.0	
	^	Name	Status	Date modified	Туре	Size
Quick access			0	06/02/2022 9:59	File folder	
Desktop	*	AccessDatabaseEngine	0	17/11/2021 16:42	Application	25 935 KB
Downloads	*	Bin.dll	0	05/05/2005 9:41	Application extension	28 KB
Documents	*	C1.Win.C1Command.4.dll	0	23/04/2012 17:34	Application extension	1,834 KB
Pictures	*	C1.Win.C1Sizer.4.dll	0	13/04/2012 11:31	Application extension	129 KB
BE Electronic	Rei	DATA FOR GUP	0	06/02/2022 15:58	Microsoft Excel Work	114 KB
Desktop		GeneralOptions	0	07/02/2022 11:33	Configuration settings	1 KB
Hebrew		🍰 GUP_Bermad	0	02/02/2022 16:34	Application	240 KB
Price List						

Figure 3 - INSTALLATION FOLDER

- Use your credentials to log in
- For initial setup please go to General → Com port and select the correct Com Port from the dropdown menu. The General tab is located at the top left corner of the screen.

File Cone	ral			
Celle (	Open Excel file			
	Com Port	Read Parameters Flows & F	actors Logger Log	
	Read	ID	0	
	Program	Power Mode	Flight mode	~
	Disconnect	Counters	0	
9-100/4"-0	CFT-CFS-10C-200 ~	Meter Value Negative Consumption Cou	nter 0	
Series	~	General Options	x	v
Diameter	~	Com port		~
Units Flow Units	~		COM4	~
P/N	ER9100CC0010C200		ок	~
	****	Pulse Width		~
U	Ipdate Fields	Pulse Value		~
1	Exit	Logger		_
		Logger Interval	15	
BI W	ERMAD ater Control Solutions			
	16			

Figure 4 - INITIAL SETUP





### **REGISTER PROGRAMMING**

- Swipe the magnet next to the BERMAD logo until the LCD blinks
- Then click the Connect button on the GUP software
  - The GUP will make sure you are pairing to the right E-Register SN/ID, click OK to confirm

🚔 GUP Bermad	Version : 1.1.7.0				1575		$\times$
File General	ř.						
C	Connect	Read Parameters	Flows & Factor	rs Logger Log			
	Read	ID		110090			
P	rogram	Power Mode		Flight mode		~	
Dis	sconnect	Counters		0			
9-100/4"-CFT	-CFS-10C-200 v	Meter Value	notion Counter	0		-1	
Series	~	Direction		Direction A		~	
Diameter Units Flow Units	GUP Do	you want to pair with N	/TU address : 110	×		~ ~ ~	
P/N	ER9100CC0010C200		OK Ca	ncel			
BE	R V1.002	Pulse Width				~	
Upd	late Fields	Pulse Value				~	
	Exit	Logger Logger Interval		15			
BER Wate	MAD er Control Salutions						
				Send promt			.:

Figure 5 - Connecting to E-Register



The software will indicate when connected successfully – bottom right corner

Read   Program   Disconnect   Disconnect   O   O   O   Counters   Meter Value   O   Negative Consumption Counter   Direction   Direction A   Display   Totalizer Units   Flow Units	Connect	Read Parameters Flows & Facto	rs Logger Log		
Program   Disconnect   Disconnect   0   0   0   Neter Value   0   Negative Consumption Counter   Direction   Direction A   Display   Totalizer Units   Flow Units   Flow Units   Flow Units   Flow Dot Place   Output Pulse   Pulse Width   Pulse Width   Pulse Value   Logger   Logger Interval	Read	ID	110090		
Disconnect   -100/4"-CFT-CFS-10C-200 ~   Series   O   Series   O   Diameter   O   Diameter   O   Diameter   O   Diameter   O   Diameter   O   Diameter   O   Display   Totalizer Units   Flow Units   Flow Units   Flow Dot Place   Output Pulse   Pulse Width   Pulse Width   Pulse Value   Couger   Logger   Logger Interval	Program	Power Mode	Flight mode	Ý	
-100/4"-CFT-CFS-10C-200   Series   Oiameter   Diameter   Units   Flow Units   Flow Units   Flow Units   Flow Dot Place   Output Pulse   Pulse Value   Output Pulse   Pulse Value	Disconnect	- Counters Meter Value	o		
Series   Diameter   Dinits   Totalizer Units   Flow Units   Flow Units   Flow Units   Flow Dot Place   Output Pulse   P/N   BER V1.002   Update Fields   Logger   Logger Interval	-100/4"-CFT-CFS-10C-200 ~	Negative Consumption Counter	0		
Diameter  Display Totalizer Units Display Totalizer Units Flow Units Flow Units Flow Dot Place Flow Dot Place Output Pulse Pulse Width Pulse Value Couput Pulse Couput Pulse Pulse Value Couput Pulse	Series 🗸 🗸	Direction	Direction A	~	
Units Image: state of the state of th	Diameter V	-Display			
Flow Units   P/N   ER9100CC0010C200   BER V1.002   Update Fields   Exit     Image: Comparison of the sector of t	Units 🗸 🗸	Flow Units		~	
P/N ER9100CC0010C200   BER V1.002 Output Pulse   Update Fields Pulse Width   Exit Logger   Logger Interval 15	Flow Units 🗸 🗸 🗸	Flow Dot Place		~	1
BER V1.002 Update Fields Exit Logger Interval	P/N ER9100CC0010C200	Output Dules			
Update Fields  Pulse Value   Logger Logger Interval 15	BER V1.002	Pulse Width		~	]
Exit Logger Interval 15	Update Fields	Pulse Value		~	]
Logger Interval 15		Logger			
	EXIL	Logger Interval	15		

Figure 6 - Connected

- To read the register parameters click the Read button and the software will display current programming status of all fields
- Once successfully read all register parameters are now on display





File Gener	ral				
	Connect	Read Parameters Flows & Facto	rs Logger Log		
		MT			
	Read	ID	110090		
	Program	Power Mode	Power On	~	
	Disconnect	Counters			
	Disconnect	Meter Value	36		
9-100/4"-M	I-M3/H-100L-200 ~	Negative Consumption Counter	0		
Series	~	Direction	Direction A	~	
D:	~	Display			
Diameter		Totalizer Units	Metric	~	
Units	Metric ~	Flow Units	M3/H	~	
Flow Units	M3/H ~	Flow Dot Place	Without Dot	~	
P/N	ER9100MM0100L200				
		Output Pulse	-		
E	BER V1.002	Pulse Width	200	~	
U	pdate Fields	Pulse Value	100L	~	
		Logger			
	Exit	Logger Interval	60		
	RMAD Iter Control Solutions				
			Read parameters	succesefuly	

Figure 7 - Reading Parameters

**Note:** For programming by sequence (Series/Diameter/Units) keep scrolling down.

For programming pulse width/value go to page 13

For programming of Flow unit measurements go to page 14



## **PROGRAMMING BY SEQUENCE**

- To start the programming sequence please choose the desired series (900/Turbo Bar/Turbo IR)
- Choose requires diameter
- Choose the units (Metric / Gallons / Cubic feet)
- Then choose the flow units
- Choose the desired pulse volume from the drop-down list located underneath the disconnect button (In the following screen shot you can see the same Turbo Bar DN100/4" pulse options for 100L, 10L, 1L and 1 M3)
- Finally click Update Fields button to load the file
- To download modified parameters to the E-Register click the program button

Read Parameters Flows & Fa	ctors Logger Log	
MT		
ID	110090	
Power Mode	Power On	~
Counters		
Meter Value	36	
Negative Consumption Coun	ter 16711680	
Direction	Direction A	~
Display		
Totalizer Units	Metric	~
Flow Units	M3/H	~
Flow Dot Place	Without Dot	~
- Output Pulse	1	
Pulse Width	200	~
Pulse Value	100L	~
Logger		
Logger Interval	60	
	Read Parameters       Flows & Fail         MT       ID         Power Mode          Counters       Meter Value         Negative Consumption Count       Direction         Direction       Display         Totalizer Units       Flow Units         Flow Dot Place       Output Pulse         Pulse Width       Pulse Value         Logger       Logger Interval	Read ParametersFlows & FactorsLoggerLogMT ID11009011009010000Power ModePower On3610000Counters361671168010000Meter Value361671168010000DisplayDirection A1000010000DisplayMetricM3/H10000Flow UnitsM3/H20010000Output Pulse100000100000100000Logger6010000001000000

Figure 8 – Programming Sequence





	Connect	Read Parameters Flows & Fact	ors Logger Log	
	Peed	MT	110000	
	Redu		110090	
	Program	Power Mode	Power On	~
	Disconnect	Counters		
		Meter Value	36	
-100/4"-M-M3/H-100L-200		<ul> <li>Negative Consumption Counter</li> </ul>	16711680	
0/4"-M	I-M3/H-100L-200	Direction	Direction A	~
0/4 -M	I-M3/H-1L-200	Display		
0/4"-M	I-M3/H-1M-200	Totalizer Units	Metric	~
s	Metric	Flow Units	M3/H	~
/ Units	M3/H	Flow Dot Place	Without Dot	~
	ERB100MM0100L200			
E	SER V1.002	Pulse Width	200	~
			200	
U	pdate Fields	Pulse Value	100L	~
	Fxit	Logger		
		Logger Interval	60	
	DMAD			
🛋 BE	RMAD			

Figure 9 - Sequencial pulse options

Electronic Register



	Connect	Read Parameters Flows & Factor	rs Logger Log	
		MT	110000	
	Read	U	110040	
	Program	Power Mode	Power On 🗸 🗸 🗸 🗸 🗸 🗸	
	Disconnect	Counters		
		Meter Value	36	
		Negative Consumption Counter	16711680	
Series	Turbo BAR 🗸 🗸	Direction	Direction A $\sim$	
Diameter	100/4" ~	Display		
		Totalizer Units	Metric 🗸 🗸	
Units	Metric	Flow Units	M3/H 🗸	
Flow Units	M3/H ~	Flow Dot Place	Without Dot 🛛 🗸 🗸 🗸 🗸 🗸 🗸 🗸 🗸 🗸 🗸 Vithout Dot	
P/N	ERB100MM0100L200	Output Pulse		
E	3ER V1.002	Pulse Width	200 ~	
U	pdate Fields	Pulse Value	100L ~	
		Logger		
-	Exit	Logger Interval	60	
5. pc	PMAD			

Figure 10 - Programming

- Once programming completed successfully notification will appear at the bottom of the screen
- Once parameters are chosen and set from the series/diameter/units etc. and the options above it a part number of the unit is displayed:





		Read Parameters Flows & Facto	rs Logger Log			
		MT		-		
	Read	ID	110090			
	Program	Power Mode	Power On 🗸 🗸 🗸 🗸			
	Disconnect	Counters				
		Meter Value	36			
-100/4"-N	M-M3/H-100L-200 ~	Negative Consumption Counter	16711680			
Series Turbo BAR ~		Direction	Direction A 🛛 🗸 🗸			
		Display				
		Totalizer Units	Metric 🗸 🗸			
Units	Metric	Flow Units	M3/H ~			
Flow Units	M3/H ~	Flow Dot Place	Without Dot 🛛 🗸 🗸			
P/N	ERB100MM0100L200	Output Pulse				
	BER V1.002	Pulse Width	200 ~			
ι	Jpdate Fields	Pulse Value	100L ~			
		Logger				
	Exit	Logger Interval	60	Ĭ.		
	ERMAD ater Control Solutions					

Figure 11 - Part Number



Part Number is set with accordance to the specifications below:



**ER** – Constant Prefix of the Item Number.

Series – 9 for 900 Series, B for Turbo BAR, I for Turbo IR.

**Diameter** – Diameter of the Water Meter\Hydrometer, in mm.

Volume – M for Metric, G for Gallons and C for Cubic-Feet.

Flow Rate – M for M3/H, L for LPS, G for GPM, C for CFS.

#### Pulse Output Configuration -

numbers and letter according to the configuration, for example 0100L represents 100 Liters pulse

Pulse Width – pulse width for example 200 ms.

Part number example: ERB100MM0100L200

The Item Number Above represents an Electronic Register for Turbo-BAR, DN100 / 4", Metric Volume, M<sup>3</sup>/H Flow Rate, with pulses output of 100L and pulse width of 200 ms.





# SPECIAL CONFIGURATION AND MODIFICATION

• After completing sequential programming, a user can modify Display and Pulse Outputs parameters manually

	Connect	Read Parameters Flows & Facto	rs Logger Log			
		MT				
	Read	ID	110090			
	Program	Power Mode	Power On		~	
1	Disconnect	Counters	36			
8-100/4"-M	I-M3/H-100L-200 ~	Negative Consumption Counter	16711680			
Series	Turbo BAR V	Direction	Direction A		~	
Diameter	100/4" ~	- Display Totolizer, Unite	Metric			
Units	Metric ~	Flow Units	M3/H	-	~	
Flow Units	M3/H ~	Flow Dot Place	Without Dot		~	
P/N	ERB100MM0100L200	- Output Pulse		_	=	
E	SER V1.002	Pulse Width	200		~	
U	pdate Fields	Pulse Value	100L		~	
	Exit	Logger				
		Logger Interval	60			
	RMAD ster Control Salutions					

Figure 12 - Special Programming

- Swipe the magnet next to the BERMAD logo until the LCD blinks
- Then click the Connect button on the GUP software
- The GUP will make sure you are pairing to the right E-Register SN/ID, click OK to confirm
- To read the register parameters click the Read button and the software will display current programming status of all fields
- Once successfully read all register parameters are now on display



-

# MODIFYING PULSE CONFIGURATION

- Pulse output is being set according to BERMAD default table
- However users can manually modify the pulse value from the drop-down menu

	Connect	Read Parameters Flows 8	Factors Logger Log	
		MT		
	Read	ID	110090	
	Program	Power Mode	Power On	~
	Disconnect	Counters		
		Meter Value	36	
B-100/4"-M	I-M3/H-100L-200 V	Negative Consumption Co	unter 16711680	
Series	Turbo BAR V	Direction	Direction A	~
Diameter 100/4"		Display Totalizer Units	Metric	~
Units Metric	Metric ~	Flow Units	М3/Н	~
Flow Units         M3/H         ~           P/N         ERB100MM0100L200		Flow Dot Place	Without Dot	~
		- Output Pulse		
E	SER V1.002	Pulse Width	200	~
U	pdate Fields	Pulse Value	100L	~
	Exit	Logger	1L 10L	
	and street in	Logger Interval	100L 1M 10M	_
BERMAD			100M	

Figure 13 - Pulse Value Selection

- Modifying the pulse configuration requires clicking on the pulse value drop down-menu and choose one of the options
- Same exact process for the pulse width
- To download modified parameters to the E-Register click the program button

Note: fast pulse rate configuration may result is shorter battery lifetime





# MODIFYING THE FLOW UNITS OF MEASUREMENT

From the display section of the screen, select the desired flow units from the drop-down menu

	Connect	Read Parameters Flows	& Factors Logger Log			
		MT				
	Read	ID	10003	10003		
	Program	Power Mode	Power On		~	
	Disconnect	Counters				
		Meter Value	489			
3-100/4"-N	1-M3/H-100L-200 ~	Negative Consumption (	Counter 0			
Series	Turbo BAR V	Direction	Direction A		~	
Diameter	100/4" ~	Display			-	
Units	Metric	Totalizer Units	Metric		<u> </u>	
onna	Hethe +	Flow Units	М3/Н	1	~	
Flow Units	M3/H ~	Flow Dot Place	M3/H L/S	M3/H L/S		
P/N	ERB100MM0100L200	Output Dules	1			
В	ER V1.011a	Pulse Width	200		-	
U	Ipdate Fields	Pulse Value	100L		~	
		Logger				
	EXIL	Logger Interval	0			
🦾 в	ERMAD					
BERMAD W	ater Control Solutions					

Figure 14 - Flow Units

- Same exact process for the flow rate dot place
- To download modified parameters to the E-Register click the program button



### **APPENDIXES**

**APPENDIX 1 - PULSE TABLE INDEX** 

Y=Standard Pulse – 200ms.

N=Non-standard pulse –requires modification of pulse width

Note: fast pulse rate configuration may result is shorter battery lifetime

#### **APPENDIX 2 - METRIC PULSE VOLUME**

METER		METRIC-PULSE VOLUME							
TYPE	METERSIZE	1L	10 L	100 L	1 m³	10 m³	100 m³		
900E	11⁄2″	Y	Y	Y	Y	Ν	Ν		
	2″	Y	Y	Y	Y	Ν	Ν		
	2.5″	Y	Y	Y	Y	Ν	Ν		
	3″	Y	Y	Y	Y	Ν	Ν		
	4″	Ν	Y	Y	Y	Ν	Ν		
	6″	Ν	Ν	Y	Y	Y	Ν		
	8″	Ν	Ν	Ν	Y	Y	Ν		
	10″	Ν	Ν	Ν	Y	Y	Ν		
	2″	Ν	Y	Y	Y	Ν	Ν		
	2.5″	Ν	Y	Y	Y	Ν	Ν		
	3″	Ν	Y	Y	Y	Ν	Ν		
<u> </u>	4″	Ν	Y	Y	Y	Ν	Ν		
[urbo-	5″	Ν	Y	Y	Y	Ν	Ν		
	6″	Ν	Ν	Y	Y	Y	Ν		
	8″	Ν	Ν	Y	Y	Y	Ν		
	10″	Ν	Ν	Ν	Y	Y	Ν		
	12″	Ν	Ν	Ν	Y	Y	Ν		
	11⁄2″	Y	Y	Y	Y	Ν	Ν		
	2″	Y	Y	Y	Y	Ν	Ν		
	2.5″	Y	Y	Y	Y	Ν	Ν		
	3″	Y	Y	Y	Y	Ν	Ν		
ш с	4″	Y	Y	Y	Y	Ν	Ν		
Ba	5″	Ν	Y	Y	Y	Ν	N		
po	6″	Ν	Ν	Y	Y	Υ	N		
2	8″	Ν	Ν	Y	Y	Y	N		
	10″	Ν	Ν	Ν	Y	Y	N		
	12″	Ν	Ν	Ν	Y	Y	N		
	16″	Ν	Ν	Ν	Y	Y	N		
	20″	Ν	Ν	Ν	Y	Y	Ν		

Figure 15 - Metric Pulse Table



#### **APPENDIX 3 - CU.FT PULSE VOLUME**

METER		CUBIC FEET-PULSE VOLUME							
TYPE	METER SIZE	0.1 CFT	1 CFT	10 CFT	100 CFT	1000 CFT	10000 CFT		
	11⁄2″	Y	Y	Y	Ν	N	N		
900E	2″	Y	Y	Y	Ν	Ν	N		
	2.5″	Y	Y	Y	Ν	N	N		
	3″	Y	Y	Y	Ν	N	N		
	4″	Y	Y	Y	Ν	Ν	N		
	6″	Ν	Y	Y	Ν	Ν	Ν		
	8″	Ν	Y	Y	Ν	Ν	Ν		
	10″	Ν	Y	Y	Ν	Ν	N		
	2″	Y	Y	Y	Ν	Ν	N		
	2.5″	Y	Y	Y	Ν	Ν	Ν		
	3″	Y	Y	Y	Ν	Ν	Ν		
<b>8</b> -8	4″	Y	Y	Y	Ν	Ν	Ν		
Iurbo-I	5″	Ν	Y	Y	Ν	Ν	Ν		
	6″	Ν	Y	Y	Ν	Ν	Ν		
	8″	Ν	Y	Y	Ν	Ν	N		
	10″	Ν	Y	Y	Y	Ν	Ν		
	12″	Ν	Y	Y	Y	Ν	Ν		
	11⁄2″	Y	Y	Y	Ν	Ν	N		
	2″	Y	Y	Y	Ν	Ν	Ν		
	2.5″	Y	Y	Y	Ν	Ν	Ν		
	3″	Y	Y	Y	Ν	Ν	Ν		
ш	4″	Y	Y	Y	Ν	Ν	N		
ar-	5″	Ν	Y	Y	Ν	Ν	N		
	6″	Ν	Y	Y	Ν	Ν	N		
n d	8″	Ν	Y	Y	Ν	Ν	N		
E.	10″	Ν	Y	Y	Ν	N	N		
	12″	Ν	Y	Y	Y	Ν	N		
	16″	Ν	Y	Y	Y	N	N		
	20″	Ν	Y	Y	Y	Ν	N		
	20″	Ν	Y	Y	Y	N	N		

Figure 16 - Cu. Ft Pulse Table

#### **APPENDIX 4 - GALLONS PULSE VOLUME**

METER				GALLONS - PL	JLSE VOLUME		
ТҮРЕ	METER SIZE	0.1 Gallons	1 Gallons	10 Gallons	100 Gallons	1000 Gallons	10000 Gallons
OE	11⁄2″	Ν	Y	Y	N	N	N
	2″	Ν	Y	Y	N	N	N
	2.5″	Ν	Y	Y	N	N	N
	3″	Ν	Y	Y	N	N	N
06	4″	Ν	Y	Y	N	N	N
	6″	Ν	N	Y	Y	N	N
	8″	Ν	N	Y	Y	N	N
	10″	Ν	N	Y	Y	N	N
	2″	Ν	Y	Y	N	N	N
	2.5″	Ν	Y	Y	N	N	N
	3″	Ν	Y	Y	N	N	N
o-IR-E	4″	Ν	Y	Y	Y	N	N
	5″	Ν	N	Y	Y	N	N
	6″	Ν	N	Y	Y	N	N
	8″	Ν	Ν	Y	Y	N	Ν
	10″	Ν	N	Y	Y	N	Ν
	12″	Ν	N	Y	Y	N	N
	11⁄2″	Ν	Y	Y	N	N	N
	2″	Ν	Y	Y	Ν	N	Ν
	2.5″	Ν	Y	Y	N	N	N
	3″	Ν	Y	Y	Ν	N	N
Щ. Ц	4″	Ν	Y	Y	Ν	N	Ν
e e	5″	Ν	N	Y	Y	N	N
ê	6″	Ν	N	Y	Y	N	N
2	8″	Ν	N	Y	Y	Y	N
	10″	Ν	N	Y	Y	Y	N
	12″	Ν	N	Y	Y	Y	N
	16″	Ν	N	Y	Y	Y	N
	20″	Ν	N	Y	Y	Y	N

Figure 17 - Gallons Pulse Table





# **REGISTER ALERTS**

#### **REVERSE FLOW ALERT (5)**

Reverse Flow Alert will be displayed at times when the water meter detects continuous reverse flow. Once detected, the reverse flow arrow will be displayed. This will continue until the water meter detects continuous forward flow.

#### LOW BATTERY ALERT (6)

Low battery alert will be displayed when the water meter detects low battery condition. The indication light will turn on continuously. This alert indicates that the remaining lifespan is less than six months.

Please note that battery lifespan varies with accordance to work time, pulse rate, pulse width, etc.





