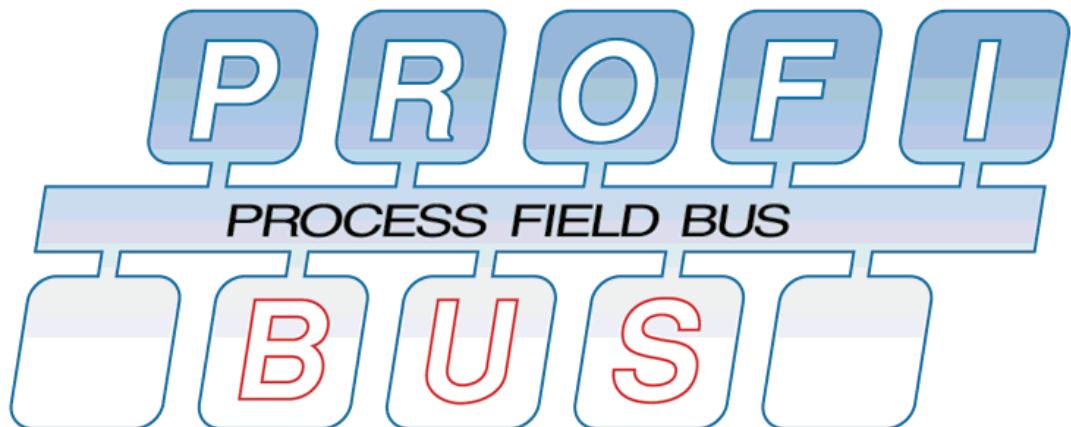


# GSE Scale Systems

GSE 60-Series Instruments  
**Profibus Communications Option  
and Application Note**

Ver 1.0.1  
3/13/09  
P/N 39-10-39398



**Profibus Trade Organization**

*a non profit corporation*

Published by  
GSE Scale Systems  
1525 Fairlane Circle.  
Allen Park, MI 48101  
USA

Copyright © 2008 GSE Scale Systems, All Rights reserved.  
Information in this manual is subject to change without notice for correction or enhancement.  
Profibus™ and PTO™ are trademarks of their respective owners.

## **Table of Contents**

<b>1 GSE</b>	<b>3</b>
<b>1.1 Profibus Basics - GSE Scale 60 Series Indicators (Profibus Slaves).</b>	<b>4</b>
1.1.1 Profibus Master.....	4
1.1.2 Profibus Slaves.....	4
1.1.3 GSD File .....	4
1.1.4 I/O Module .....	4
1.1.5 I/O Assemblies.....	4
1.1.6 Explicit Messaging .....	4
1.1.7 Overview of the GSE Profibus Option.....	4
1.1.7.1 GSE Profibus Option Board.....	4
1.1.7.2 Profibus and the GSE 60 Series Indicators .....	5
<b>1.2 Initial Setup of indicator</b>	<b>5</b>
<b>1.3 Serial Port One Settings</b>	<b>6</b>
<b>1.4 Initial Profibus Master Setup</b>	<b>6</b>
<b>1.5 The I/O Modules</b>	<b>7</b>
Table 1.5.....	7
<b>1.6 The I/O Assemblies</b>	<b>7</b>
Table 1.6 Scale Registers for I/O Assemblies .....	8
<b>1.7 Explicit Messaging</b>	<b>9</b>
Table 1.7 Explicit Messaging Address Chart .....	10
<b>1.8 Advanced Profibus Setup and Modification</b>	<b>19</b>
1.8.1 How to Modify the Profibus Register Map.....	19
1.8.1.1 Examples of replacing Register Values .....	19
1.8.2 Reclaiming Setup Memory.....	22
<b>1.9 Setpoints</b>	<b>23</b>
Table 1.9 Setpoint Target Variables .....	23
<b>1.10 Informational Parameters for Profibus</b>	<b>24</b>
1.10.1 P60000 FRam ( $E^2$ ) Available .....	24
1.10.2 Profibus Specific.....	24
1.10.2.1 Using P60301 Reg Check.....	24
<b>1.11 New Weigh Mode Parameter 95 – Network Status, Option Board LEDs</b>	<b>25</b>
Table 1.11 Defines the meaning of each digit displayed at parameter 95 "Profibus Stat" .....	25
<b>1.12 New Scale Parameter P96</b>	<b>26</b>
Table 1.12 Bit Definition for Scale Parameter 96 .....	26
<b>1.13 Communicating with the device</b>	<b>27</b>
1.13.1 OUTPUT DATA .....	27
Table 1.13.1 Output Data Format .....	27

1.13.2 INPUT DATA .....	27
Table 1.13.2 Input Data Format.....	28
1.13.3 COMMUNICATION EXAMPLES .....	28
1.13.3.1 Get I/O Assembly data for one scale .....	28
1.13.3.2 Get I/O Assembly data for two scales.....	29
1.13.3.3 Request model number of indicator.....	29
1.13.3.4 Read a Register (word).....	30
1.13.3.5 Read a Register (long).....	30
1.13.3.6 Write a Register (word).....	30
1.13.3.7 Write a Register (long).....	31
1.13.3.8 Read a Register (string).....	31
1.13.3.9 Write a Register (string).....	32
1.13.3.10 Turn a coil on .....	32
1.13.3.11 Turn a coil off .....	33
1.13.3.12 Read coil status .....	33
1.13.3.13 Run a user created macro .....	34
1.13.3.14 Check if user created macro running .....	34
1.13.3.15 Run a built-in macro.....	34
1.13.3.16 Check if built-in macro running .....	35
1.13.4 RETURNED ERROR CODES .....	35
1.13.4.1 ERROR Trying to Read a Register (word).....	36
<b>1.14 TroubleShooting and Profibus related Error Messages-----</b>	<b>36</b>
1.14.1 Framing or other Comm Port Errors when attempting Setup (Script or Upload). ....	36
1.14.2 Error Codes ***See the 60 Series Tech Manual Appendix E for the description of other Codes .....	36

This is a “Table of Contents preview” for quality assurance

The full manual can be purchased from our store:

<https://the-checkout-tech.com/manuals/GSE/60 Series Profibus technical reference manual.pdf>

And our free Online Keysheet maker:

<https://the-checkout-tech.com/Cash-Register-Keysheet-Creator/>

[HTTPS://THE-CHECKOUT-TECH.COM](https://THE-CHECKOUT-TECH.COM)