







	Model Series	100	100	500	650	100	110	120	200	210	215	220	230	240	320	410	520	530	Memory
Control Commands																			
Change_Battery_Enter				•	•														
Change_Tare_Up				•	•														
Change_Display_Back				•	•														
Change_Reset_Left				•	•														
Change_Menu				•	•														
Change_Unit_Right				•	•														
Change_Shunt_Exit				•	•														
Change_Hold_Down				•	•														
	Model Category	ETH	IDA	IHH	IPM	USB													Memory
	Model Series	100	100	500	650	100	110	120	200	210	215	220	230	240	320	410	520	530	Memory
Debugging Commands																			
Read_Memory_Register		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
Write_Memory_Register		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Read_EEPROM_Register		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
Write_EEPROM_Register		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Read_TEDS_Register				•	•														
Write_TEDS_Register				•	•														•
Read_Channel_Register		•	•	•	•									•			•	•	
Write_Channel_Register		•	•	•	•									•			•	•	•
Read_Page_Register														•					

Command Response

This table provides a comprehensive list of commands and the response of each command. The responses have been separated for commands that were successful and unsuccessful. If the command was sent and received successfully, then the response will typically be either 0 or a number in a given range. Please refer to the sections related to a specific command for more information. If the command was sent and received unsuccessfully, then the response will be “Error” and the [ErrorDescription](#) will be updated. Please refer to the [Common Command Errors](#) or [Specific Command Errors](#) for more information.

This table provides a comprehensive list of commands and the specific command errors that can be returned by the [ErrorDescription](#) when a command is unsuccessful.

Command Response	If Successful	If Unsuccessful
Connection Commands		
Open_Device_Connection	N/A	N/A
Close_Device_Connection	N/A	N/A
Command Response	If Successful	If Unsuccessful
Data Link Commands		
Slave_Activity_Inquiry	0	Error
Command Response	If Successful	If Unsuccessful
Set Commands		
Set_Sensor_Identification_Number	0	Error
Set_Unit_Code	0	Error
Set_Decimal_Point	0	Error
Set_Calibration_Register	0	Error
Set>Loading_Point	0	Error

Set_Load_of_Loading_Point	0	Error
Set_Sensor_Configuration	0	Error
Set_Load_Switch	0	Error
Set_Number_of_Loading_Points	0	Error
Set_ADC_Configuration	0	Error
Set_ADC_Configuration2	0	Error
Set_Average_Setting	0	Error
Set_Voltage_Output	0	Error
Set_Digital_Components	0	Error
Set_Calibration_Mode	0	Error
Set_Sensitivity	0	Error
Set_Bridge_Resistance	0	Error
Set_Direction	0	Error
Set_Zero_Correction	0	Error
Set_Shunt_Value	0	Error
Set_Calibration_Code	0	Error
Set_Calibration_Day	0	Error
Set_Calibration_Month	0	Error
Set_Calibration_Year	0	Error
Set_Pulses_Per_Rotation	0	Error
Set_CrossTalk	0	Error
Set_Number_of_Active_Channels	0	Error
Set_Type_of_Calibration	0	Error
Set_Active_Page_Number	0	Error
Set_Destination_MAC_Address	0	Error
Set_Destination_IP_Address	0	Error
Set_Destination_Port_Number	0	Error
Set_Source_IP_Address	0	Error
Set_Source_Port_Number	0	Error
Reset_Angle	0	Error
Command Response	If Successful	If Unsuccessful
Get Commands		
Get_Offset_Value	Number	Error
Get_Fullscale_Value	Number	Error
Normal_Data_Request	Number	Error
Fast_Data_Request	String	Error
Version_of_Board	0	Error
Reset_Board	0	Error
Get_Display_Page	0	Error
Get_Internal_Register	Number	Error
Get_Data_Logging	0	Error

Get_Rotation_Values	0	Error
Get_Device_Count	Number	Error
Get_Device_Serial_Number	Number	Error
Get_Loading_Point	Number	Error
Get_Offset_Load	Number	Error
Get_Load_of_Loading_Point	Number	Error
Get_Fullscale_Load	Number	Error
Get_Number_of_Loading_Points	Number	Error
Get_Output_Type	Number	Error
Get_Sensitivity	Number	Error
Get_Bridge_Resistance	Number	Error
Get_ADC_PGA_Setting	Number	Error
Get_ADC_Sampling_Rate_Setting	Number	Error
Get_Sensor_Identification_Number	Number	Error
Get_Unit_Code	Number	Error
Get_Direction	Number	Error
Get_Shunt_Value	Number	Error
Get_Decimal_Point	Number	Error
Get_Calibration_Code	Number	Error
Get_Calibration_Day	Number	Error
Get_Calibration_Month	Number	Error
Get_Calibration_Year	Number	Error
Get_Pulses_Per_Rotation	Number	Error
Get_Voltage_Output	Number	Error
Get_CrossTalk	Number	Error
Get_Number_of_Active_Channels	Number	Error
Get_Type_of_Calibration	Number	Error
Get_Active_Page_Number	Number	Error
Get_Destination_MAC_Address	0	Error
Get_Destination_IP_Address	0	Error
Get_Destination_Port_Number	0	Error
Get_Source_MAC_Address	0	Error
Get_Source_IP_Address	0	Error
Get_Source_Port_Number	0	Error
Get_Excitation	Number	Error
Get_Analog_Voltage_Output	Number	Error
Get_Gain_Switch	Number	Error
Get_Polarity	Number	Error
Get_Shunt_Resistor	Number	Error
Get_Sensor_Sensitivity	Number	Error
Get_Zero_Potentiometer	Number	Error



ErrorDescription	"Timeout Error"	"Packet Number Error"	"Packet Size Error"	"Packet Frame Error"	"Packet Command Error"	"Command Number Error"	"Command Error"	"End Of Packet Error"	"TEDS Error"	"Invalid Type of Board"
Data Link Commands										
Slave_Activity_Inquiry	•	•	•	•	•	•	•	•	•	
ErrorDescription	"Timeout Error"	"Packet Number Error"	"Packet Size Error"	"Packet Frame Error"	"Packet Command Error"	"Command Number Error"	"Command Error"	"End Of Packet Error"	"TEDS Error"	"Invalid Type of Board"
Set Commands										
Set_Sensor_Identification_Number	•	•	•	•	•	•	•	•	•	•
Set_Unit_Code	•	•	•	•	•	•	•	•	•	•
Set_Decimal_Point	•	•	•	•	•	•	•	•	•	•
Set_Calibration_Register	•	•	•	•	•	•	•	•	•	•
Set_Loading_Point	•	•	•	•	•	•	•	•	•	•
Set_Load_of_Loading_Point	•	•	•	•	•	•	•	•	•	•
Set_Sensor_Configuration	•	•	•	•	•	•	•	•	•	•
Set_Load_Switch	•	•	•	•	•	•	•	•	•	•
Set_Number_of_Loading_Points	•	•	•	•	•	•	•	•	•	•
Set_ADC_Configuration	•	•	•	•	•	•	•	•	•	•
Set_ADC_Configuration2	•	•	•	•	•	•	•	•	•	•
Set_Average_Setting	•	•	•	•	•	•	•	•	•	•
Set_Voltage_Output	•	•	•	•	•	•	•	•	•	•
Set_Digital_Components	•	•	•	•	•	•	•	•	•	•
Set_Calibration_Mode	•	•	•	•	•	•	•	•	•	•
Set_Sensitivity	•	•	•	•	•	•	•	•	•	•
Set_Bridge_Resistance	•	•	•	•	•	•	•	•	•	•
Set_Direction	•	•	•	•	•	•	•	•	•	•
Set_Zero_Correction	•	•	•	•	•	•	•	•	•	•
Set_Shunt_Value	•	•	•	•	•	•	•	•	•	•
Set_Calibration_Code	•	•	•	•	•	•	•	•	•	•
Set_Calibration_Day	•	•	•	•	•	•	•	•	•	•
Set_Calibration_Month	•	•	•	•	•	•	•	•	•	•
Set_Calibration_Year	•	•	•	•	•	•	•	•	•	•
Set_Pulses_Per_Rotation	•	•	•	•	•	•	•	•	•	•
Set_CrossTalk	•	•	•	•	•	•	•	•	•	•
Set_Number_of_Active_Channels	•	•	•	•	•	•	•	•	•	•
Set_Type_of_Calibration	•	•	•	•	•	•	•	•	•	•
Set_Active_Page_Number	•	•	•	•	•	•	•	•	•	•
Set_Destination_MAC_Address	•	•	•	•	•	•	•	•	•	•
Set_Destination_IP_Address	•	•	•	•	•	•	•	•	•	•
Set_Destination_Port_Number	•	•	•	•	•	•	•	•	•	•
Set_Source_IP_Address	•	•	•	•	•	•	•	•	•	•
Set_Source_Port_Number	•	•	•	•	•	•	•	•	•	•
Reset_Angle	•	•	•	•	•	•	•	•	•	•
ErrorDescription	"Timeout Error"	"Packet Number Error"	"Packet Size Error"	"Packet Frame Error"	"Packet Command Error"	"Command Number Error"	"Command Error"	"End Of Packet Error"	"TEDS Error"	"Invalid Type of Board"







Write_Channel_Register	•	•	•	•	•	•	•	•	•	
Read_Page_Register	•	•	•	•	•	•	•	•	•	

Specific Command Errors

This table provides a comprehensive list of commands and the specific command errors that can be returned by the [ErrorDescription](#) when a command is unsuccessful.

	ErrorDescription
Connection Commands	
Open_Device_Connection	
Close_Device_Connection	
	ErrorDescription
Data Link Commands	
Slave_Activity_Inquiry	
	ErrorDescription
Set Commands	
Set_Sensor_Identification_Number	"Invalid Serial Number"
Set_Unit_Code	"Invalid Unit Code"
Set_Decimal_Point	"Invalid Decimal Point"
Set_Calibration_Register	"Invalid Register"
Set_Loading_Point	"Invalid Loading Point"
Set_Load_of_Loading_Point	"Invalid Loading Point" "Invalid Load Value"
Set_Sensor_Configuration	"Invalid Sensor Configuration"
Set_Load_Switch	"Invalid Simulated Load"
Set_Number_of_Loading_Points	"Invalid Number Of Loading Points"
Set_ADC_Configuration	"Invalid Sampling Rate"
Set_ADC_Configuration2	"Invalid ADC Configuration"
Set_Average_Setting	"Invalid Average Setting"
Set_Voltage_Output	"Invalid Loading Point"
Set_Digital_Components	
Set_Calibration_Mode	
Set_Sensitivity	"Invalid Sensitivity"
Set_Bridge_Resistance	"Invalid Bridge Resistance"
Set_Direction	"Invalid Direction"
Set_Zero_Correction	"Invalid Type Of Calibration" "Invalid Point"
Set_Shunt_Value	"Invalid Shunt Value"
Set_Calibration_Code	"Invalid Calibration Code"
Set_Calibration_Day	"Invalid Calibration Day"
Set_Calibration_Month	"Invalid Calibration Month"
Set_Calibration_Year	"Invalid Calibration Year"
Set_Pulses_Per_Rotation	"Invalid Pulses Per Rotation"
Set_CrossTalk	"Invalid CrossTalk"

Set_Number_of_Active_Channels	"Invalid Number Of Active Channels"
Set_Type_of_Calibration	"Invalid Type Of Calibration"
Set_Active_Page_Number	"Invalid Active Page Number"
Set_Destination_MAC_Address	
Set_Destination_IP_Address	
Set_Destination_Port_Number	"Invalid Port Number"
Set_Source_IP_Address	
Set_Source_Port_Number	"Invalid Port Number"
Reset_Angle	
	ErrorDescription
Get Commands	
Get_Offset_Value	
Get_Fullscale_Value	
Normal_Data_Request	
Fast_Data_Request	"Invalid Firmware Version"
Version_of_Board	
Reset_Board	
Get_Display_Page	
Get_Internal_Register	"Invalid Register"
Get_Data_Logging	"Invalid Counter"
Get_Rotation_Values	
Get_Device_Count	
Get_Device_Serial_Number	
Get>Loading_Point	"Invalid Type Of Calibration" "Invalid Point"
Get_Offset_Load	
Get_Load_of>Loading_Point	"Invalid Point"
Get_Fullscale_Load	
Get_Number_of>Loading_Points	
Get_Output_Type	
Get_Sensitivity	
Get_Bridge_Resistance	
Get_ADC_PGA_Setting	
Get_ADC_Sampling_Rate_Setting	
Get_Sensor_Identification_Number	
Get_Unit_Code	
Get_Direction	
Get_Shunt_Value	
Get_Decimal_Point	
Get_Calibration_Code	
Get_Calibration_Day	

Get_Calibration_Month	
Get_Calibration_Year	
Get_Pulses_Per_Rotation	
Get_Voltage_Output	
Get_CrossTalk	
Get_Number_of_Active_Channels	
Get_Type_of_Calibration	
Get_Active_Page_Number	
Get_Destination_MAC_Address	
Get_Destination_IP_Address	
Get_Destination_Port_Number	
Get_Source_MAC_Address	
Get_Source_IP_Address	
Get_Source_Port_Number	
Get_Excitation	
Get_Analog_Voltage_Output	
Get_Gain_Switch	
Get_Polarity	
Get_Shunt_Resistor	
Get_Sensor_Sensitivity	
Get_Zero_Potentiometer	
Get_Span_1_Potentiometer	
Get_Span_2_Potentiometer	
Get_Average_Setting	
Get_Type_of_Board	
Get_Hardware_Version	
Get_Firmware_Version	
Get_Firmware_Year	
Get_Firmware_Month	
	ErrorDescription
Backup Commands	
Create_Back_Up	"Invalid Page Number"
Restore_Back_Up	"Invalid Page Number"
	ErrorDescription
Control Commands	
Change_Battery_Enter	
Change_Tare_Up	
Change_Display_Back	
Change_Reset_Left	
Change_Menu	
Change_Unit_Right	

Change_Shunt_Exit	
Change_Hold_Down	
	ErrorDescription
Debugging Commands	
Read_Memory_Register	"Invalid Address"
Write_Memory_Register	"Invalid Address" "Invalid Data"
Read_EEPROM_Register	"Invalid Address"
Write_EEPROM_Register	"Invalid Address" "Invalid High Byte" "Invalid Low Byte"
Read_TEDS_Register	"Invalid High Address" "Invalid Low Address"
Write_TEDS_Register	"Invalid Data" "Invalid High Address" "Invalid Low Address"
Read_Channel_Register	"Invalid Address"
Write_Channel_Register	"Invalid Address" "Invalid Data"
Read_Page_Register	"Invalid Page Number"