This document explains the configuration para[ ]
without building another firmware version. By[ ]
software. Many values are set via Tennant Ca[ ]
was built with. There may be additional param[ ]

Name	Options

Parameter Number

Parameter Name

Size (bytes)

Data Type

    Boolean

    String

    Enum

    Struct

    Standard Types

    Arrays

Firmware Control

    R

    R/W

Software Exposure

    Public

    Semi-Public

    Private

Parameter Access

    Standard

    Design

    Advanced

Memory Location

    EEPROM

    Serial Flash

    FRAM

Board or Module

Description

meters within the project. Configuration parameters are values that can be changed
y using the config USB protocol under Galileo, these values can be changed using
pture at the end of the manufacturing line and set up with the options the machine
neter not included for other modules.

Each parameter must have a unique identity on the machine. A parameter number
should not exist within another board such that any parameter value can be set.
Name of the parameter used for enumeration for descriptive identity.
The size of the parameter in bytes. There may be a subset of data values contained
within the parameter that contain their own defined size. The sum of the parts
should be less than or equal to the parameter size.
Specifies the type of data the parameter is saved as. Types cannot be mixed and
double arrays are not supported.
Single bit indicating true or false.
An ASCII string, null terminated if less than the parameter size.
A unique value representing a specific state or ID.
A selection of different types of data grouped into a structure where the types may
be of different sizes.
Any of the C standard types such as UInt8,….
An array of standard types where each array element is the same size.
The data in the parameter may be read/write or just read by the firmware expecting
configuration manager to set the data externally.
Read
Read/Write

Galileo software control over the parameter. Some parameters are set via software
control only such that the machine will operate according to specification. Other
parameters are used for configuration options which must be set via user.
Set via user with software
Set via user with software but specific controlled access (not direct)
Not avialable for user access to modify.

Something that is likely to change machine to machine with each order.

Project design setpoints to meet product requirements. Shouldn't be changed
Could be changed if there was good reason and would need to be exposed in
software to allow access.
The physical type of memory of the save location on the machine. It may be located
on different boards.
On micro or external EEPROM (limited write cycles)
Serial Flash IC (large chunks of data, page writes)
External memory (almost unlimited write cycles)
The name of the module where the parameter is stored since parameter ID's are
global to the machine.
Description of the parameter.