

# Rank-65851 over GF(32)

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## The equation

The equation of the surface is :

$$X_3^3 + X_0^2 X_1 + X_0^2 X_2 + X_1^2 X_2 + X_0 X_1 X_2 = 0$$

( 0, 0, 0, 1, 1, 1, 0, 0, 1, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0 )

The point rank of the equation over GF(32) is 1143014437

## General information

|                            |            |
|----------------------------|------------|
| Number of lines            | 0          |
| Number of points           | 1057       |
| Number of singular points  | 1          |
| Number of Eckardt points   | 0          |
| Number of double points    | 0          |
| Number of single points    | 0          |
| Number of points off lines | 1057       |
| Number of Hesse planes     | 0          |
| Number of axes             | 0          |
| Type of points on lines    |            |
| Type of lines on points    | $0^{1057}$ |

## Singular Points

The surface has 1 singular points:

$$0 : P_2 = \mathbf{P}(0, 0, 1, 0) = \mathbf{P}(0, 0, 1, 0)$$

## The 0 Lines

The lines and their Pluecker coordinates are:

Rank of lines: ( )

Rank of points on Klein quadric: ( )

### **Eckardt Points**

The surface has 0 Eckardt points:

### **Double Points**

The surface has 0 Double points:

The double points on the surface are:

### **Single Points**

The surface has 0 single points:

The single points on the surface are:

The single points on the surface are:

### **Points on surface but on no line**

The surface has 1057 points not on any line:

Too many to print.

### **Line Intersection Graph**

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Neighbor sets in the line intersection graph:

The surface has 1057 points:

Too many to print.