

### ISC PEM NETWORK COMMUNICATION DATA INTERFACE

ISC PEM Integration Issued: September 29, 2025 V1.0

## COMMUNICATION PROTOCOL

#### **COMMUNICATION PROTOCOL**

Address	Unit	ISC TO LINE	L	LINE TO ISC
0.0.0	Bit	Life bit	l	Life bit
0.0.1	Bit	System ready	1	Motor running
0.0.2	Bit	Belt moving	F	Reset fault
0.0.3	Bit	Master fault	F	Reset warning
0.0.4	Bit	Master warning	5	Spare
0.0.5	Bit	System ready for next product	5	Spare
0.0.6	Bit	Spare	5	Spare
0.0.7	Bit	Spare	5	Spare
0.1.0	Bit	Spare	F	Run mode internal
0.1.1	Bit	Spare	F	Run mode external
0.1.2	Bit	Spare	9	Spare
0.1.3	Bit	Spare	5	Spare
0.1.4	Bit	Spare	5	Spare
0.1.5	Bit	Spare	5	Spare
0.1.6	Bit	Spare	5	Spare
0.1.7	Bit	Spare	5	Spare
1.0.0	Bit	Min gap fault	F	Product destination (write as word)
1.0.1	Bit	Infeed jam fault	F	Product destination (write as word)
1.0.2	Bit	Spare	F	Product destination (write as word)
1.0.3	Bit	Buffer full fault	F	Product destination (write as word)
1.0.4	Bit	Peg sensor fault	F	Product destination (write as word)
1.0.5	Bit	Destination too late fault	F	Product destination (write as word)
1.0.6	Bit	Spare	F	Product destination (write as word)
1.0.7	Bit	Spare	F	Product destination (write as word)
1.1.0	Bit	Encoder fault	F	Product destination (write as word)
1.1.1	Bit	Motor signal fault	F	Product destination (write as word)
1.1.2	Bit	Spare	F	Product destination (write as word)
1.1.3	Bit	Spare	F	Product destination (write as word)
1.1.4	Bit	IO-link fault	F	Product destination (write as word)
1.1.5	Bit	Supply voltage fault	F	Product destination (write as word)
1.1.6	Bit	Spare	F	Product destination (write as word)
1.1.7	Bit	Overcurrent fault	F	Product destination (write as word)

### COMMUNICATION PROTOCOL

Address	Unit	ISC TO LINE	LINE TO ISC
2.0.0	Bit	Small gap warning	Spare
2.0.1	Bit	Infeed jam warning	Spare
2.0.2	Bit	Spare	Spare
2.0.3	Bit	Buffer almost full warning	Spare
2.0.4	Bit	AIM Peg missing / damaged	Spare
2.0.5	Bit	Destination late warning	Spare
2.0.6	Bit	Spare	Spare
2.0.7	Bit	Spare	Spare
2.1.0	Bit	Belt speed too low	Spare
2.1.1	Bit	Belt speed too high	Spare
2.1.2	Bit	Belt elongation limit reached	Spare
2.1.3	Bit	Belt acceleration too high	Spare
2.1.4	Bit	Belt deceleration too high	Spare
2.1.5	Bit	Spare	Spare
2.1.6	Bit	High CPU usage	Spare
2.1.7	Bit	Spare	Spare
3.0.0	Bit	Status IO 0	Spare
3.0.1	Bit	Status IO 1	Spare
3.0.2	Bit	Status IO 2	Spare
3.0.3	Bit	Status IO 3	Spare
3.0.4	Bit	Status IO 4	Spare
3.0.5	Bit	Status IO 5	Spare
3.0.6	Bit	Spare	Spare
3.0.7	Bit	Spare	Spare
3.1.0	Bit	Spare	Spare
3.1.1	Bit	Spare	Spare
3.1.2	Bit	Spare	Spare
3.1.3	Bit	Spare	Spare
3.1.4	Bit	Spare	Spare
3.1.5	Bit	Spare	Spare
3.1.6	Bit	Spare	Spare
3.1.7	Bit	Spare	Spare
4.0.0	Word	Spare	Spare
5.0.0	Word	Throughput (PPM)	Spare
6.0.0	Word	Product destination (last inducted product)	Spare
7.0.0	Word	Spare	Spare
8.0.0	Word	Spare	Spare
9.0.0	Word	Spare	Spare

# COMMUNICATION PROTOCOL

Address	Unit	ISC TO LINE	LINE TO ISC
10.0.0	Bit	Fault / Warning Subsystem 0 (PEM)	Spare
10.0.1	Bit	Fault / Warning Subsystem 1	Spare
10.0.2	Bit	Fault / Warning Subsystem 2	Spare
10.0.3	Bit	Fault / Warning Subsystem 3	Spare
10.0.4	Bit	Fault / Warning Subsystem 4	Spare
10.0.5	Bit	Fault / Warning Subsystem 5	Spare
10.0.6	Bit	Fault / Warning Subsystem 6	Spare
10.0.7	Bit	Fault / Warning Subsystem 7	Spare
10.1.0	Bit	Fault / Warning Subsystem 8	Spare
10.1.1	Bit	Fault / Warning Subsystem 9	Spare
10.1.2	Bit	Fault / Warning Subsystem 10	Spare
10.1.3	Bit	Fault / Warning Subsystem 11	Spare
10.1.4	Bit	Fault / Warning Subsystem 12	Spare
10.1.5	Bit	Fault / Warning Subsystem 13	Spare
10.1.6	Bit	Fault / Warning Subsystem 14	Spare
10.1.7	Bit	Fault / Warning Subsystem 15	Spare
11.0.0	Bit	Fault / Warning Subsystem 16	Spare
11.0.1	Bit	Fault / Warning Subsystem 17	Spare
11.0.2	Bit	Fault / Warning Subsystem 18	Spare
11.0.3	Bit	Fault / Warning Subsystem 19	Spare
11.0.4	Bit	Fault / Warning Subsystem 20	Spare
11.0.5	Bit	Fault / Warning Subsystem 21	Spare
11.0.6	Bit	Fault / Warning Subsystem 22	Spare
11.0.7	Bit	Fault / Warning Subsystem 23	Spare
11.1.0	Bit	Fault / Warning Subsystem 24	Spare
11.1.1	Bit	Fault / Warning Subsystem 25	Spare
11.1.2	Bit	Fault / Warning Subsystem 26	Spare
11.1.3	Bit	Fault / Warning Subsystem 27	Spare
11.1.4	Bit	Fault / Warning Subsystem 28	Spare
11.1.5	Bit	Fault / Warning Subsystem 29	Spare
11.1.6	Bit	Fault / Warning Subsystem 30	Spare
11.1.7	Bit	Fault / Warning Subsystem 31	Spare
12.0.0	Word	Spare	Spare
13.0.0	Word	Spare	Spare
14.0.0	Word	Spare	Spare
15.0.0	Word	Spare	Spare