

SPIRE Telemetry Data Rate
SOF1

DCU Science	Nominal	
Number of data channels	56	
Number of engineering channels	4	
Bits per channel	16	bits
Frame size	960	bits
Frames per packet	8	
Packet size	7856	bits
Sampling rate	80	frames/sec
Packets per sec	10	

MCU Science	Nominal	
Number of data channels	0	
Number of engineering channels	2	
Bits per channel	32	bits
Frame size	64	bits
Frames per packet	120	
Packet size	7856	bits
Sampling rate	240	frames/sec
Packets per sec	2	

SCU Science	Nominal	
Number of data channels	0	
Number of engineering channels	20	
Bits per channel	16	bits
Frame size	320	bits
Frames per packet	4	
Packet size	1456	bits
Sampling rate	4	frames/sec
Packets per sec	1	

DPU Science	Nominal	
Number of data channels	0	
Number of engineering channels	16	
Bits per channel	16	bits
Frame size	256	bits
Frames per packet	4	
Packet size	1200	bits
Sampling rate	4	frames/sec
Packets per sec	1	

Housekeeping	Nominal	
Number of DCU data channels	32	
Number of MCU data channels	32	
Number of SCU data channels	64	
Number of DPU data channels	122	
Bits per channel	16	bits
Frame size	4000	bits
Frames per packet	1	
Packet size	4176	bits
Sampling rate	0.5	frames/sec
Packets per sec	0.5	

Total packet rate	14.5	
Total data rate	99016	

SPIRE Telemetry Data Rate
SOF1