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Command Handbook

For the COSMOS Demo Project



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Commands

COSMOS STARTCMDLOG

Starts logging commands for an interface

Item Name	Description	Min	Max	Default	Bit Offset	Bit Size	Data Type	Units
SYNC	COSMOS Command Sync Pattern	449838109	449838109	449838109	0	32	UINT	
OPCODE	COSMOS Command Opcode Id Value: 3	3	3	3	32	32	UINT	
LENGTH	COSMOS Command Length of Command Data in Bytes	0	65536	3	64	32	UINT	
INTERFACE	Interface to start logging on - ALL starts logging on all interfaces			ALL	96	256	STRING	
LABEL	Optional label to place on log files				352	0	STRING	

COSMOS STARTLOGGING

Starts logging both commands and telemetry for an interface

Item Name	Description	Min	Max	Default	Bit Offset	Bit Size	Data Type	Units
SYNC	COSMOS Command Sync Pattern	449838109	449838109	449838109	0	32	UINT	
OPCODE	COSMOS Command Opcode Id Value: 2	2	2	2	32	32	UINT	
LENGTH	COSMOS Command Length of Command Data in Bytes	0	65536	3	64	32	UINT	
INTERFACE	Interface to start logging on - ALL starts logging on all interfaces			ALL	96	256	STRING	
LABEL	Optional label to place on log files				352	0	STRING	

COSMOS STARTTLMLOG

Starts logging telemetry for an interface

Item Name	Description	Min	Max	Default	Bit Offset	Bit Size	Data Type	Units
SYNC	COSMOS Command Sync Pattern	449838109	449838109	449838109	0	32	UINT	
OPCODE	COSMOS Command Opcode Id Value: 4	4	4	4	32	32	UINT	
LENGTH	COSMOS Command Length of Command Data in Bytes	0	65536	3	64	32	UINT	
INTERFACE	Interface to start logging on - ALL starts logging on all interfaces			ALL	96	256	STRING	
LABEL	Optional label to place on log files				352	0	STRING	

COSMOS STOPCMDLOG

Stops logging commands for an interface

Item Name	Description	Min	Max	Default	Bit Offset	Bit Size	Data Type	Units
SYNC	COSMOS Command Sync Pattern	449838109	449838109	449838109	0	32	UINT	



OPCODE	COSMOS Command Opcode Id Value: 6	6	6	6	32	32	UINT
LENGTH	COSMOS Command Length of Command Data in Bytes	0	65536	3	64	32	UINT
INTERFACE	Interface to stop logging on - ALL stops logging on all interfaces			ALL	96	256	STRING
LABEL	Optional label to place on log files				352	0	STRING

COSMOS STOPLOGGING

Stops logging both commands and telemetry for an interface

Item Name	Description	Min	Max	Default	Bit Offset	Bit Size	Data Type	Units
SYNC	COSMOS Command Sync Pattern	449838109	449838109	449838109	0	32	UINT	
OPCODE	COSMOS Command Opcode Id Value: 5	5	5	5	32	32	UINT	
LENGTH	COSMOS Command Length of Command Data in Bytes	0	65536	3	64	32	UINT	
INTERFACE	Interface to stop logging on - ALL stops logging on all interfaces			ALL	96	256	STRING	
LABEL	Optional label to place on log files				352	0	STRING	

COSMOS STOPTLMLOG

Stops logging telemetry for an interface

Item Name	Description	Min	Max	Default	Bit Offset	Bit Size	Data Type	Units
SYNC	COSMOS Command Sync Pattern	449838109	449838109	449838109	0	32	UINT	
OPCODE	COSMOS Command Opcode Id Value: 7	7	7	7	32	32	UINT	
LENGTH	COSMOS Command Length of Command Data in Bytes	0	65536	3	64	32	UINT	
INTERFACE	Interface to stop logging on - ALL stops logging on all interfaces			ALL	96	256	STRING	
LABEL	Optional label to place on log files				352	0	STRING	

PI PUMP

Set pump voltage

Item Name	Description	Min	Max	Default	Bit Offset	Bit Size	Data Type	Units
LENGTH	Length of packet in bytes, must be 9	9	9	9	0	32	UINT	
CMD_ID	ID of command, must be 0x30 Id Value: 48	48	48	48	32	8	UINT	
VOLTAGE	Voltage given to pump, between 0 and 12V	0.0	12.0	0.0	40	32	FLOAT	

PI ZERO_PRESSURE_SENSORS

Set pump voltage

Item Name	Description	Min	Max	Default	Bit Offset	Bit Size	Data Type	Units
LENGTH	Length of packet in bytes, must be 17	17		17	17	0	32	UINT
CMD_ID	ID of command, must be 0x01 Id Value: 1	1		1	1	32	8	UINT



Write Conversion: ZeroPressureSensors

V_ZERO	Zero value for Venturi Pressure	-3.402823e+38 3.402823e+38 0.0	40	32	FLOAT
P_ZERO	Zero value for Pump Pressure	-3.402823e+38 3.402823e+38 0.0	72	32	FLOAT
S_ZERO	Zero value for Static Pressure	-3.402823e+38 3.402823e+38 0.0	104	32	FLOAT
