Cmds	RS232 Cmds	Elaboration	Description	Example	Response
1	SOM	Set Operation Mode	Changes the Operation Mode. 0: Deactivate EDFA. 1: Activate EDFA in ACC mode. 2: Activate EDFA in APC mode. 3: Activate EDFA in AGC mode.(For HWA Only)	SOM {SP} 0 {CR,LF} SOM {SP} 1 {CR,LF} SOM {SP} 2 {CR,LF} SOM {SP} 3 {CR,LF}	SOM {SP} 0 {CR,LF} SOM {SP} 1 {CR,LF} SOM {SP} 2 {CR,LF} SOM {SP} 3 {CR,LF}
2	SOM	Enquiry Operation Mode	Reports the EDFA operation mode. The response indicates the EDFA is in active in APC mode.	SOM {CR,LF}	SOM {SP} 2 {CR,LF}
3	WLP	Write Amplifier Power	Sets EDFA Output Power to 19.5 dBm Power value setting can accept of up to 1 decimal precision.	WLP {SP} 19.5 {CR,LF}	WLP {SP} 19.5 {CR,LF}
4	WLP	Enquiry Set Amplifier Power	Reports the Set Output Power and in this case, it is set at 19.0 dBm. Reported power value should be up to 1 decimal precision.	WLP {CR,LF}	WLP: {SP} 19.0 {SP} dBm {CR,LF}
5	WLC {SP} [X] {SP} [Y]	Write Pump Laser Current	Sets LD Output Current. X can be:1 or 2 or 3. 1, 2 or 3 indicates LD number. Y is the LD current value. Return should be with 1 decimal precision. If only 1 LD EDFA, when user type WLC 2, the return is "FWC".	WLC {SP} 1 {SP} 500 {CR,LF} WLC {SP} 2 {SP} 800 {CR,LF} WLC {SP} 3 {SP} 1000 {CR,LF}	WLC {SP} 1 {SP} 500.0 {CR,LF} WLC {SP} 2 {SP} 800.0 {CR,LF} WLC {SP} 3 {SP} 1000.0 {CR,LF}
6	WLC {SP} [X]	Enquiry Set Pump Laser Current	Reports the Set LD current vlaue to the respective LD number. Return should be with 1 decimal precision.	WLC {SP} 1 {CR,LF} WLC {SP} 2 {CR,LF} WLC {SP} 3 {CR,LF}	LD1: {SP} 100.0 {SP} mA {CR,LF} LD2: {SP} 500.0 {SP} mA {CR,LF} LD3: {SP} 1100.0 {SP} mA {CR,LF}
7	WLG	Write Amplifier Gain(For HWA Only)	Sets EDFA Gain to 20.5 dB if the module has gain setting. Power value setting should accept of up to 1 decimal precision,	WLG {SP} 20.5 {CR,LF} WLG {SP} 19 {CR, LF}	WLG {SP} 20.5 {CR,LF} WLG {SP} 19.0 {CR,LF}
8	WLG	Enquiry Set Amplifier Gain(For HWA Only)	Reports the Set Output Gain. In this case, it is read as 18.3 dB. Reported power value should be up to 1 decimal precision,	WLG {CR,LF}	WLG: {SP} 18.3 {SP} dB {CR,LF}

9	SLI	Set Low Input Mute	0: Disable 1: Enable When 0, the EDFA will NOT be disabled eventhough input power is less than the set theshold input power level. When 1, the EDFA will be disabled depends on set input power level. Please refer set input power commands (WLI).	SLI {SP} 0 {CR,LF} or SLI {SP} 1 {CR,LF}	DISABLE {CR,LF} or ENABLE {CR,LF}
10	SLI	Enquiry Low Input Mute	Reports the setting status of low input disable function.	SLI {CR,LF}	DISABLE {CR,LF} or ENABLE {CR,LF}
11	WLI	Set Low Input Level	Set the low input level and if input level lower than the set value, it will disable the amplifier if SLI is set to 1.	WLI {SP} -10 {CR,LF}	WLI {SP} -15.5 {CR,LF}
12	WLI	Enquiry Low Input Level	Read the value of low input level.	WLI {CR,LF}	WLI {SP} -15.5 {SP} dBm {CR,LF}
13	SHT	Set High Temperature	0: Disable 1: Enable When 0, the EDFA will still works regardless of EDFA exceed the high temperature level. When 1, the EDFA output power will NOT be disabled when EDFA temperature > temperature ALARM level. It will give a alarm "ON" in the "RAL" commands. When 1, the EDFA output power will be disabled only when EDFA temperature > shutdown temperature.	SHT {SP} 0 {CR,LF} or SHT {SP} 1 {CR,LF}	DISABLE {CR,LF} or ENABLE {CR,LF}

14	SHT	Enquiry High Temperature	Reports the setting status of EDFA response if there happens High Temperature	SHT {CR,LF}	DISABLE {CR,LF} or ENABLE {CR,LF}
15	WTA {SP} [T1] {SP} [T2]	Write Temperature Alarm	Sets the Temperature Alarm Level & The Shutdown Temperature Threshold. Example shows that the temperature alarm threshold is set at 55C, and shutdown temperature is set to 65C.	WTA {SP} 55 {SP} 65 {CR,LF}	OK {CR,LF}
16	WTA	Enquiry Temperature Alarm	Reports Current EDFA Temperature, set Temperature Alarm & set Shutdown Temperature. The response indicates that case temperature is 30.3 C, set temperature alarm level is 55.0C, set Shutdown temperature threshold is 65.0C. ***Note:***	WTA {CR,LF}	TEMP: {SP} 30.3 {SP} C, {CR,LF} Alarm: {SP} 55.0 {SP} C, {CR,LF} Shutdown: {SP} 65.0 {SP} C {CR,LF}
20	RLC	Enquiry Laser Current	Reports Pump LD Drive Current. The response indicates that LD1 is driven with 405mA, LD2 is driven with 1.050A of current, LD3 is driven with 8.055A of current. If there is LD4, please add in accordingly to the list. If only one LD EDFA, the return should be ALL: {SP} 405 {SP} mA {CR,LF}	RLC {CR,LF}	ALL: {SP} 405 {SP} 1050 {SP} 8055 {SP} mA {CR,LF} *Note: If the EDFA is a 3 Pumps type.*
25	SHI	Set High Input Shutdown Function	0: Disable 1: Enable	SHI {SP} 0 {CR,LF} or SHI {SP} 1 {CR,LF}	DISABLE {CR,LF} or ENABLE {CR,LF}
26	SHI	Enquiry High Input Shutdown Function	Reports the setting status of disabled function on hihg input. The setting is DISABLE which is 0.	SHI {CR,LF}	DISABLE {CR,LF} or ENABLE {CR,LF}
27	WHI	Write High Input Threshold	Sets High Input Power Signal Threshold.	WHI {SP} 13.0 {CR, LF}	WHI {SP} 13.0 {CR, LF}
28	WHI	Enquiry High Input Threshold	Reports High Input Power Signal Threshold. Return value should be up to 1 decimal.	WHI {CR, LF}	WHI: {SP} 13.0 {SP} dBm {CR, LF}

33	RLT	Enquiry Laser Temperature	Reports Pump Laser Temperature. The response indicates that LD1 temperature is 25.2C, LD2 temperature is 28C. If it has LD3, please report it accrodingly. If only one LD EDFA, the return should be ALL: {SP} 25.2 {SP} C {CR,LF}	RLT {CR,LF}	ALL: {SP} 25.2 {SP} 28.0 {SP} C {CR,LF}
34	ROP {SP} [x]	Report Optical Power	Reports the Optical Power. X: 1 or 2. 1=Power input monitor in dBm 2= Power output monitor in dBm Power input is measured as -3.2dBm. Power output is measured as 22.5 dBm. Read back optical power is in 2 decimal precision. Note: If output power lower that PD detection range, please retunr as -50.00 dBm	ROP {SP} 1 {CR,LF} or ROP {SP} 2 {CR,LF}	PDM1: {SP} -5.00 {SP} dBm {CR,LF} or PDM2: {SP} 22.50 {SP} dBm {CR,LF} If no optical power detected: PDM1: {SP} -50.00 {SP} dBm {CR,LF} or PDM2: {SP} -50.00 {SP} dBm {CR,LF}
35	RSN	Read Serial Number	Read the unit serial number.	RSN {CR, LF}	SN: {SP}10xxxxxx {CR,LF} *Note: 8 digit number.*
36	VER	Provide produ	Return product information	VER {CR, LF}	Model: {SP} SFA-200C-23-M-SM {CR, LF} FW Ver: {SP} 1.01C {CR, LF} Serial Num: {SP} xxxxxx {CR, LF} PN: {SP} xxxxxxxx {CR,LF}
37	SRS	Set RS232 Ba	Set the RS232 Communication Baud rate to 19200.	SRS {SP} 115200 {CR, LF}	OK {CR,LF} *Note: Due to the change of baud rate, the retunr of "OK" might not be able to perform. End user has to change his RS232 speed to 19200*
38	SRS	Report the current RS232 Baud rate Setting	Report the current setting of RS232 to be 19200.	SRS {CR, LF}	RS232 {SP} SPEED: {SP} 19200 {SP} Bds {CR, LF}

41	RAL	Read Alarm S	Reports alarms that Present in EDFA. Note: LOI = Loss of input signal LOP= Loss of output power TMP= Temperature of pump LD LC1=Pump laser 1 operating current alarm LP1=Pump laser 1 operating power alarm LT1=Pump laser 1 temperature alarm LC2=Pump laser 2 operating current alarm LP2=Pump laser 2 operating power alarm LT2=Pump laser 2 temperature alarm 0: Normal 1: Alarm On 2: Not exist If Laser diode 2 is not exist, please use 2.	RAL {CR, LF}	LOI: {SP} 1 {CR,LF} LOP: {SP} 1 {CR, LF} TMP: {SP} 0 {CR, LF} LC1: {SP} 0 {CR, LF} LP1: {SP} 0 {CR, LF} LT1: {SP} 0 {CR, LF} LC2: {SP} 0 {CR, LF} LP2: {SP} 0 {CR, LF} LT2: {SP} 0 {CR, LF}
	Note:				