

ACE-2002/2002E/202 Modules

ATM, HDLC, CES and LAN Modules

This data sheet lists the names and details of all the modules available for ACE-2002/2002 or ACE-202.

Table 1. ATM Modules

Module Name	Description	Data Rates [Mbps]	Connector Type	Wavelength [nm]	Typical Range		Optical Output [dBm]		Optical Input [dBm]	
					[km]	[miles]	[min]	[max]	[min]	[max]
ACE-M/SC13LH/622**	STM-4/OC-12, single mode, long haul	622	SC	1310	15	9	-3	2	-3	-28
ACE-M/SC13M/622**	STM-4/OC-12, multimode	622	SC	1310	0.5	0.31	-14	-19	-14	-16
ACE-M/SC15LH/622**	STM-4/OC-12, single mode, short haul	622	SC	1550	80	50	-3	2	-5	-28
ACE-M/SC13L/622**	STM-4/OC-12, single mode, long haul	622	SC	1310	15	9	-14	-7	-3	-28
ACE-M/CX/BNC/155	STM-1, electrical	155	BNC	-	0.15	0.093	-	-	-	-
ACE-M/FC13L/155	STM-1/OC-3, single mode, short haul	155	FC	1310	30	19	-8	-11	-2	-31
ACE-M/FC13L/155D**	STM-1/OC-3, dual port, single mode, short haul	155	FC	1310	30	19	-8	-11	-2	-31
ACE-M/FC13L/155R	STM-1/OC-3, dual port, APS redundancy, single mode, short haul	155	FC	1310	30	19	-8	-11	-2	-31
ACE-M/FC13LH/155	STM-1/OC-3, single mode, long haul	155	FC	1310	50	31	-1	-4	-2	-34
ACE-M/FC13LH/155D**	STM-1/OC-3, dual port, single mode, long haul	155	FC	1310	50	31	-1	-4	-2	-34
ACE-M/FC13LH/155R	STM-1/OC-3, dual port, APS redundancy, single mode, long haul	155	FC	1310	50	31	-1	-4	-2	-34
ACE-M/FC15LH/155	STM-1/OC-3, single mode, long haul	155	FC	1550	80	50	-1	-4	-2	-34



Modules

ATM, HDLC, CES and LAN Modules

Table 1. ATM Modules (cont.)

Module Name	Description	Data Rates [Mbps]	Connector Type	Wavelength [nm]	Typical Range		Optical Output [dBm]		Optical Input [dBm]	
					[km]	[miles]	[min]	[max]	[min]	[max]
ACE-M/SC13L/155	STM-1/OC-3, single mode, short haul	155	SC	1310	30	19	-8	-11	-2	-31
ACE-M/SC13L/155D**	STM-1/OC-3, dual port, single mode, short haul	155	SC	1310	30	19	-8	-11	-2	-31
ACE-M/SC13L/155R	STM-1/OC-3, dual port, APS redundancy, single mode, short haul	155	SC	1310	30	19	-8	-11	-2	-31
ACE-M/SC13LH/155	STM-1/OC-3, single mode, long haul	155	SC	1310	50	31	-1	-4	-2	-34
ACE-M/SC13LH/155D**	STM-1/OC-3, dual port, single mode, long haul	155	SC	1310	50	31	-1	-4	-2	-34
ACE-M/SC13LH/155R	STM-1/OC-3, dual port APS redundancy, single mode, long haul	155	SC	1310	50	31	-1	-4	-2	-34
ACE-M/SC13M/155	STM-1/OC-3, multimode	155	SC	1310	2	1.25	-15	-18	-14	-31
ACE-M/SC13M/155D**	STM-1/OC-3, dual port, multimode	155	SC	1310	2	1.25	-15	-18	-14	-31
ACE-M/SC13M/155R	STM-1/OC-3, dual port, APS redundancy, multimode	155	SC	1310	2	1.25	-15	-18	-14	-31
ACE-M/SC15LH/155	STM-1/OC-3, single mode, long haul	155	SC	1310	80	50	-1	-4	-2	-34
ACE-M/ST13L/155	STM-1/OC-3, single mode, short haul	155	ST	1310	30	19	-8	-11	-2	-31
ACE-M/ST13L/155D**	STM-1/OC-3, dual port, single mode, short haul	155	ST	1310	30	19	-8	-11	-2	-31
ACE-M/ST13L/155R	STM-1/OC-3, dual port, APS redundancy, single mode, short haul	155	ST	1310	30	19	-8	-11	-2	-31
ACE-M/ST13LH/155D**	STM-1/OC-3, dual port, single mode, long haul	155	ST	1310	50	31	-1	-4	-2	-34
ACE-M/ST13LH/155R	STM-1/OC-3, dual port, APS redundancy single mode, long haul	155	ST	1310	50	31	-1	-4	-2	-34
ACE-M/E3	E3 UNI electrical	34.3	BNC	-	0.15	0.093	-	-	-	-
ACE-M/T3	T3 UNI electrical	44.7	BNC	-	0.15	0.093	-	-	-	-
ACE-M/UTP/25	ATM 25 Mbps over UTP	25.6	RJ-45	-	0.1	0.062	-	-	-	-
ACE-M/E1	E1 UNI	2.048	RJ-45, BNC	-	-	-	-	-	-	-

Table 1. ATM Modules (cont.)

Module Name	Description	Data Rates [Mbps]	Connector Type	Wavelength [nm]	Typical Range		Optical Output [dBm]		Optical Input [dBm]	
					[km]	[miles]	[min]	[max]	[min]	[max]
ACE-M/T1	T1 UNI, electrical	1.54	RJ-45	-	-	-	-	-	-	-
ACE-M/IMA-UNI/4E1	4 balanced E1 ATM/UNI, IMA	2.048	RJ-45	-	-	-	-	-	-	-
ACE-M/IMA-UNI/4E1/UNBAL	4 unbalanced E1 ATM/UNI, IMA	2.048	RJ-45***	-	-	-	-	-	-	-
ACE-M/IMA-UNI/4T1	4 balanced T1 ATM/UNI, IMA	1.54	RJ-45	-	-	-	-	-	-	-
ACE-M/IMA-NI/8E1****	8 balanced E1 IMA	2.048	RJ-45	-	-	-	-	-	-	-
ACE-M/IMA-UNI/8E1/UNBAL****	8 unbalanced E1 IMA	2.048	BNC***	-	-	-	-	-	-	-
ACE-M/IMA/8T1****	8 balanced T1 IMA	1.54	RJ-45	-	-	-	-	-	-	-

Notes:

* Typical distance is calculated using common peripheral equipment and environment conditions. It may therefore vary according to user-specific equipment and environment conditions.

** Supported by ACE-2002 and ACE-2002E only.

*** Adapter cable provided.

**** Supported by ACE-2002E only.

Modules

ATM, HDLC, CES and LAN Modules

Table 2. HDLC, CES and LAN Modules

Module Name	Description	Connector Type
ACE-M/4HDLC/RS530	Four port HDLC	DB-25 female
ACE-M/4HDLC/V35	Four port HDLC	V.35 female
ACE-M/4HDLC/X21	Four port HDLC	DB-15 female
ACE-M/CES/E1	Single balanced E1 CES	RJ-45
ACE-M/CES/E1/UNBAL	Single unbalanced E1 CES	BNC***
ACE-M/CES/T1	Single T1 CES	RJ-45
ACE-M/CES/4E1	Four balanced E1 CES	RJ-45
ACE-M/CES/4E1/UNBAL	Four unbalanced E1 CES	BNC***
ACE-M/CES/4T1	Four T1 CES	RJ-45
ACE-M/CES/8E1**	Eight balanced E1 CES	RJ-45
ACE-M/CES/8E1/UNBAL**	Eight unbalanced E1 CES	BNC***
ACE-M/CES/8T1**	Eight T1 CES	RJ-45
ACE-M/LAN-UTP	Ethernet/Fast Ethernet	RJ-45
ACE-M/LAN-UTP/D*	Dual Ethernet/Fast Ethernet	RJ-45
ACE-M/LAN-UTP/E	Enhanced performance Ethernet/Fast Ethernet	RJ-45
ACE-M/LAN-LC13L	Fast Ethernet, single mode, 1310 nm	LC
ACE-M/LAN-LC13L/D*	Dual Fast Ethernet, single mode, 1310 nm	LC
ACE-M/LAN-LC13L/E	Enhanced performance Fast Ethernet, single mode, 1310 nm	LC
ACE-M/LAN-LC13M	Fast Ethernet, multimode, 1310 nm	LC
ACE-M/LAN-LC13M/D*	Dual Fast Ethernet, multimode, 1310 nm	LC
ACE-M/LAN-LC13M/E	Enhanced performance Fast Ethernet, multimode, 1310 nm	LC

Notes:

- * Supported by ACE-2002 and ACE-2002E only.
- ** Supported by ACE-2002E only.
- *** Adapter cable provided.

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