

**Updated Table 200-3**

PMD type	Receive conditions	SIGNAL_DETECT value
Super-PON type PMD	Average input optical power $\leq$ Signal detect threshold (min) in Table 200-6 or Table 200-8 <del>at the specified receiver wavelength</del> , as applicable	FAIL
	Average input optical power $\geq$ <del>Receive sensitivity (max)</del> Minimum mean input power in Table 200-6 or Table 200-8 with a compliant signal input <del>at the specified receiver wavelength</del> , as applicable	OK
	All other conditions	Unspecified

**200.2.12.3 Major capabilities/options**

Item	Feature	Subclause	Value/Comment	Status	Support
*SPG10D	10GBASE-SP1-D	200.2.6	10G symmetric Super-PON OLT PMD	O.1	Yes [] No []
*SPG10U	10GBASE-SP1-U	200.2.7	10G symmetric Super-PON ONU PMD	O.1	Yes [] No []
*SPG102.5D	10/2.5GBASE-SP1-D	200.2.6	10/2.5G asymmetric Super-PON OLT PMD	O.1	Yes [] No []
*SPG102.5U	10/2.5GBASE-SP1-U	200.2.7	10/2.5G asymmetric Super-PON ONU PMD	O.1	Yes [] No []
*INS	Installation/cabling	200.2.11	Items marked with INS include installation practices and cable specifications not applicable to a PHY manufacturer	O.1	Yes [] No []

**200.2.12.4 PMD functional specifications**

Item	Feature	Subclause	Value/Comment	Status	Support
FN1	Transmit function	200.2.4.3	Conveys bits from PMD service interface to MDI	M	Yes []
FN2	Transmitter optical signal	200.2.4.3	Highest optical power transmitted is a logic one	M	Yes []
FN3	Receive function	200.2.4.4	Conveys bits from MDI to PMD service interface	M	Yes []
FN4	Receiver optical signal	200.2.4.4	Higher optical power received is a logic one	M	Yes []
FN5	ONU signal detect function	200.2.4.5.1	Mapping to PMD service interface	M	Yes []
FN6	ONU signal detect parameter	200.2.4.5.1	Generated according to Table 200-3	M	Yes []
FN7	OLT signal detect function	200.2.4.5.2	Mapping to PMD service interface	O/2	Yes [] No []
FN8	OLT signal detect function	200.2.4.5.2	Provided by higher layer	O/2	Yes [] No []
FN9	OLT signal detect parameter	200.2.4.5.2	Generated according to Table 200-3	O	Yes [] No []
FN10	Delay variation	200.2.4.1.1	Less than 0.25 EQT	M	Yes []
FN11	Channel plan	200.2.5	Channel to wavelength mapping	M	Yes []

**200.2.12.5 PMD to MDI optical specifications for 10GBASE-SP1-D**

Item	Feature	Subclause	Value/Comment	Status	Support
SPG10D1	10GBASE-SP1-D transmitter	200.2.6.1	Meets specifications in Table 200-5	SPG10D:M	Yes [] N/A []
SPG10D2	10GBASE-SP1-D receiver	200.2.6.2	Meets specifications in Table 200-6	SPG10D:M	Yes [] N/A []

**200.2.12.6 PMD to MDI optical specifications for 10GBASE-SP1-U**

Item	Feature	Subclause	Value/Comment	Status	Support
SPG10U1	10GBASE-SP1-U transmitter	200.2.7.1	Meets specifications in Table 200-7	SPG10U:M	Yes [] N/A []
SPG10U2	10GBASE-SP1-U receiver	200.2.7.2	Meets specifications in Table 200-8	SPG10U:M	Yes [] N/A []

**200.2.12.7 PMD to MDI optical specifications for 10/2.5GBASE-SP1-D**

Item	Feature	Subclause	Value/Comment	Status	Support
SPG102.5D1	10/2.5GBASE-SP1-D transmitter	200.2.6.1	Meets specifications in Table 200-5	SPG102.5D:M	Yes [] N/A []
SPG102.5D2	10/2.5GBASE-SP1-D receiver	200.2.6.2	Meets specifications in Table 200-6	SPG102.5D:M	Yes [] N/A []

**200.2.12.8 PMD to MDI optical specifications for 10/2.5GBASE-SP1-U**

Item	Feature	Subclause	Value/Comment	Status	Support
SPG102.5U1	10/2.5GBASE-SP1-U transmitter	200.2.7.1	Meets specifications in Table 200-7	SPG102.5U:M	Yes [] N/A []
SPG102.5U2	10/2.5GBASE-SP1-U receiver	200.2.7.2	Meets specifications in Table 200-8	SPG102.5U:M	Yes [] N/A []

**200.2.12.9 Definitions of optical parameters and measurement methods**

Item	Feature	Subclause	Value/Comment	Status	Support
OM1	Measurement cable	200.2.9.1	2 m to 5 m in length	M	Yes [ ]
OM2	Center wavelength	200.2.9.3		M	Yes [ ]
OM3	Optical power	200.2.9.4		M	Yes [ ]
OM4	Extinction ratio	200.2.9.5		M	Yes [ ]
OM5	RIN <sub>x</sub> OMA	200.2.9.6		M	Yes [ ]
OM6	Transmit optical waveform (transmit eye)	200.2.9.7		M	Yes [ ]
OM7	Transmitter and dispersion penalty (TDP)	200.2.9.8		M	Yes [ ]
OM8	Receiver sensitivity	200.2.9.9		M	Yes [ ]
OM9	Receiver OSNR tolerance	200.2.9.10		M	Yes [ ]
OM10	Jitter measurements	200.2.9.11		M	Yes [ ]
OM11	Laser on/off timing measurement	200.2.9.12		M	Yes [ ]
OM12	Receiver settling timing measurement	200.2.9.13		M	Yes [ ]
OM13	Maximum ripple	200.2.9.14		M	Yes [ ]
OM14	Clear link passband	200.2.9.15		M	Yes [ ]
OM15	Maximum and minimum residual chromatic dispersion	200.2.9.16		M	Yes [ ]
OM16	Maximum inter-channel crosstalk	200.2.9.17		M	Yes [ ]
OM17	Maximum differential group delay	200.2.9.18		M	Yes [ ]
OM18	Maximum optical path OSNR penalty	200.2.9.19		M	Yes [ ]
OM19	Minimum optical return loss	200.2.9.20		M	Yes [ ]
OM20	Maximum spectral excursion	200.2.9.21		M	Yes [ ]
OM21	Maximum power excursion	200.2.9.22		M	Yes [ ]
OM22	Burst-mode gain excursion	200.2.9.23		M	Yes [ ]

**Note to editor: this table assumes comments #618 accepted, with the addition of subclause 200.2.9.15**

**200.2.12.10 Characteristics of the fiber optic cabling and MDI**

Item	Feature	Subclause	Value/Comment	Status	Support
FO1	Fiber optic cabling	200.2.11.1	Specified in Table 200–9 and Table 200–10	INS:M	Yes [ ] N/A [ ]
FO2	MDI requirements	200.2.11.2	Meet the interface performance specifications of IEC 61753-1, if remateable	INS:O	Yes [ ] No [ ] N/A [ ]

**Note to editor: this table assumes comments #630 accepted, with the removal of draft 1.3 subclause 200.2.11.2**

**200.2.12.11 Environmental specifications**

<b>Item</b>	<b>Feature</b>	<b>Subclause</b>	<b>Value/Comment</b>	<b>Status</b>	<b>Support</b>
ES1	General safety	200.2.10.1	Conforms to IEC 60950-1	M	Yes [ ]
ES2	Laser safety—IEC Hazard Level 1	200.2.10.2	Conform to Hazard Level 1 laser requirements defined in IEC 60825-1 and IEC 60825-2	M	Yes [ ]
ES3	Documentation	200.2.10.2	Explicitly defines requirements and usage restrictions to meet safety certifications	M	Yes [ ]
ES4	Operating temperature range	200.2.10.4	The operating temperature range is declared	M	Yes [ ]
ES5	Operating temperature range label	200.2.10.5	Provided for field-pluggable components	M	Yes [ ]