

<pre>GCP 2.0 message PrinterDescriptionSection { optional SupportedContentType supported_content_type = 1; optional PrintingSpeed printing_speed = 2; optional PwgRasterConfig pwg_raster_config = 3; optional Color color = 100; optional Duplex duplex = 101; optional PageOrientation page_orientation = 102; optional Copies copies = 103; optional Margins margins = 104; optional Dpi dpi = 105; optional FitToPage fit_to_page = 106; optional PageRange page_range = 107; optional MediaSize media_size = 108; optional Collate collate = 109; optional ReverseOrder reverse_order = 110; } </pre>	<pre>GCP 2.pwg message PrinterDescriptionSection { repeated ContentType supported_content_type = 1; repeated PrintSpeed supported_print_speed = 2; repeated PrintMode supported_print_modes = 3; optional Color color = 4; optional Duplex duplex = 5; optional bool page_orientation_supported = 6; optional int32 copies_max = 7; optional bool borderless_margins_supported = 8; optional bool scaling_supported = 9; repeated Media supported_media = 10; optional bool collate_supported = 11; optional bool reverse_order_supported = 12; extensions 100 to 199; } </pre>
<pre>message SupportedContentType { message Option { required string content_type = 1; required int32 rank = 2; optional string min_version = 3; optional string max_version = 4; } repeated Option option = 1; } </pre>	<pre>message ContentType { enum OptionCT { CUSTOM = 0; DEFAULT = 1; UNKNOWN = 2; APPLICATION_OCTET_STREAM = 3; APPLICATION_PDF = 4; APPLICATION_POSTSCRIPT = 5; APPLICATION_VND_PWG_XHTML_PRINT_XML = 6; APPLICATION_VND_HP_PCL = 7; IMAGE_G3FAX = 8; IMAGE_JPEG = 9; IMAGE_TIFF = 10; IMAGE_TIFF_FX = 11; TEXT_HTML = 12; TEXT_PLAIN = 13; TEXT_PLAIN_CHARSET_ISO_8859_1 = 14; TEXT_PLAIN_CHARSET_US_ASCII = 15; TEXT_PLAIN_CHARSET_UTF_8 = 16; extensions 100 to 199; } required OptionCT content_type = 1; optional string min_version = 3; optional string max_version = 4; extensions 100 to 119; } </pre>

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message PrintingSpeed {
  message Option {
    required float speed_ppm = 1;
    repeated Color.Type color_type = 2;
    repeated Dpi.Type dpi_type = 3;
    repeated MediaSize.Type media_size_type = 4;
  }
  repeated Option option = 1;
}

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message PrintingSpeed { // normalized to a fixed size
  required int32 ppm = 1;
  required Color.mode color_mode = 2;
  required Quality quality = 3;
  required ContentOptimize optimize = 4;
}

```

```

message Color {
  enum Type {
    STANDARD_COLOR = 0;
    STANDARD_MONOCHROME = 1;
    CUSTOM_COLOR = 2;
    CUSTOM_MONOCHROME = 3;
  }
  message Option {
    required string vendor_id = 1;
    required Type type = 2;
    optional string custom_display_name = 3;
    optional bool is_default = 4;
  }
  repeated Option option = 1;
}

```

```

message Color {
  enum Mode {
CUSTOM = 0;
DEFAULT = 1;
UNKNOWN = 2;
    AUTO = 3;
    BI_LEVEL = 4;
    COLOR = 5;
    HIGHLIGHT = 6;
    MONOCHROME = 7;
    PROCESS_BI_LEVEL = 8;
    PROCESS_MONOCHROME = 9;
    extensions 100 to 119;
  }
  enum Space {
CUSTOM = 0;
DEFAULT = 1;
UNKNOWN = 2;
    RGB = 3;
    BLACK = 4;
    CMYK = 5;
    S_GRAY = 6;
    S_RGB = 7;
    ADOBE_RGB = 8;
    DEVICE_1 = 9;
    DEVICE_2 = 10;
    DEVICE_3 = 11;
    DEVICE_4 = 12;
    DEVICE_5 = 13;
    DEVICE_6 = 14;
    DEVICE_7 = 15;
    DEVICE_8 = 16;
    DEVICE_9 = 17;
    DEVICE_10 = 18;
    DEVICE_11 = 19;
    DEVICE_12 = 20;
    DEVICE_13 = 21;
    DEVICE_14 = 22;
  }
}

```

	<pre> DEVICE_15 = 23; extensions 100 to 119; } required Mode mode = 1; required Space space = 2; optional string color_display_name = 3; optional string vendor_id = 4; extensions 100 to 119; } </pre>
<pre> message Duplex { enum Type { NO_DUPLEX = 0; LONG_EDGE = 1; SHORT_EDGE = 2; MANUAL_DUPLEX = 3; } message Option { required Type type = 1; optional bool is_default = 2 [default= false]; } repeated Option option = 1; } </pre>	<pre> message Duplex { enum Type { CUSTOM = 0; DEFAULT = 1; UNKNOWN = 2; NO_DUPLEX = 3; LONG_EDGE = 4; SHORT_EDGE = 5; } // Not Extensible } required Type type = 1; required bool manual_duplex = 2; } </pre>
<pre> message Margins { enum Type { BORDERLESS = 0; STANDARD = 1; CUSTOM = 2; } message Option { required Type type = 1; required int32 top_microns = 2; required int32 right_microns = 3; required int32 bottom_microns = 4; required int32 left_microns = 5; optional bool is_default = 6 [default = false]; } repeated Option option = 1; optional int32 min_top_microns = 2; optional int32 min_right_microns = 3; optional int32 min_bottom_microns = 4; optional int32 min_left_microns = 5; } </pre>	<pre> message Margins { required int32 top = 1; required int32 left = 2; required int32 bottom = 3; required int32 right = 4; required Unit units = 5; required bool borderless = 6; } </pre>

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message Dpi {
  enum Type {
    CUSTOM = 0;
    DRAFT = 1;
    NORMAL = 2;
    PHOTO = 3;
    BEST = 4;
  }
  message Option {
    required Type type = 1;
    required int32 horizontal_dpi = 2;
    required int32 vertical_dpi = 3;
    optional bool is_default = 4
    [default= false];
  }
  repeated Option option = 1;
  optional int32 min_horizontal_dpi = 2;
  optional int32 max_horizontal_dpi = 3;
  optional int32 min_vertical_dpi = 4;
  optional int32 max_vertical_dpi = 5;
}

```

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message PrintMode {
  required Quality quality = 1;
  required ContentOptimize content = 2;
  required int32 horz_dpi = 3;
  required int32 vert_dpi = 4;
  extensions 100 to 119;
}

```

```

message FitToPage {
  enum Type {
    NO_FITTING = 0;
    FIT_TO_PAGE = 1;
    GROW_TO_PAGE = 2;
    SHRINK_TO_PAGE = 3;
  }
  message Option {
    required Type type = 1;
    optional bool is_default = 2
    [default = false];
  }
  repeated Option option = 1;
}

```

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message Scale {
  enum Fit {
CUSTOM = 0;
DEFAULT = 1;
UNKNOWN = 2;
    NO_FIT = 3;
    FIT_VERTICAL = 4;
    FIT_HORIZONTAL = 5;
    FIT_SCALE = 6;
    FIT_ALL = 7;
  }
  optional Fit fit_type = 1;
  optional int32 scale = 2;
}

```

```

message MediaSize {
  enum Type {
    CUSTOM = 0;
    A0 = 1;
    A1 = 2;
    A2 = 3;
    A3 = 4;
  }
}

```

```

message Media {
  required MediaSizeName media_size = 1;
  optional int32 media_size_height = 2;
  optional int32 media_size_width = 3;
  required Margins media_min_margins = 4;
  required MediaType media_type = 5;
}

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<pre> A3_PLUS = 5; A4 = 6; A5 = 7; LETTER = 8; LEGAL = 9; LEDGER = 10; } message Option { required Type type = 1; optional int32 width_microns = 2; optional int32 height_microns = 3; optional bool is_continuous_feed = 4; optional bool is_default = 5 [default= false]; } repeated Option option = 1; optional int32 max_width_microns = 2; optional int32 max_height_microns = 3; } </pre>	<pre> optional MediaSource tray = 6; optional Duplex duplex = 7; extensions 100 to 119; } </pre>
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<pre> message PageOrientation { enum Type { PORTRAIT = 0; LANDSCAPE = 1; REVERSE_PORTRAIT = 2; REVERSE_LANDSCAPE = 3; } message Option { required Type type = 1; optional bool is_default = 2 [default = false]; } repeated Option option = 1; } </pre>	<pre> enum PageOrientation { CUSTOM = 0; DEFAULT = 1; UNKNOWN = 2; LANDSCAPE = 3; PORTRAIT = 4; REVERSE_LANDSCAPE = 5; REVERSE_PORTRAIT = 6; NONE = 7; // Not Extensible } </pre>
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<pre> </pre>	<pre> enum Quality { CUSTOM = 0; DEFAULT = 1; UNKNOWN = 2; DRAFT = 3; NORMAL = 4; HIGH = 5; // Not Extensible } </pre>
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	<pre> } enum ContentOptimize { CUSTOM = 0; DEFAULT = 1; UNKNOWN = 2; TEXT = 3; GRAPHICS = 4; TEXT_AND_GRAPHICS = 5; PHOTO = 6; // Not Extensible } </pre>
	<pre> enum MediaSizeName { CUSTOM = 0; DEFAULT = 1; UNKNOWN = 2; CUSTOM_IN = 10; CUSTOM_MM = 11; // North American Standard Sheet Media Sizes NA_INDEX_3X5_3X5IN = 100; NA_PERSONAL_3o625X6o5IN = 101; NA_MONARCH_3o875X7o5IN = 102; NA_NUMBER_9_3o875X8o875IN = 103; NA_INDEX_4X6_4X6IN = 104; NA_NUMBER_10_4o125X9o5IN = 104; NA_A2_4o375X5o75IN = 105; NA_NUMBER_11_4o5X10o375IN = 106; NA_NUMBER_12_4o75X11IN = 107; NA_5X7_5X7IN = 108; NA_INDEX_5X8_5X8IN = 109; NA_NUMBER_14_5X11o5IN = 110; NA_INVOICE_5o5X8o5IN = 111; NA_INDEX_4X6_EXT_6X8IN = 112; NA_6X9_6X9IN = 113; NA_C5_6o5X9o5IN = 114; NA_7X9_7X9IN = 115; NA_EXECUTIVE_7o25X10o5IN = 116; NA_GOVT_LETTER_8X10IN = 117; NA_GOVT_LEGAL_8X13IN = 118; NA_QUARTO_8o5X10o83IN = 119; NA_LETTER_8o5X11IN = 120; NA_FANFOLD_EUR_8o5X12IN = 121; NA_LETTER_PLUS_8o5X12o69IN = 122; </pre>

NA_FOOLSCAP_8o5X13IN	= 123;
NA_LEGAL_8o5X14IN	= 124;
NA_SUPER_A_8o94X14IN	= 125;
NA_9X11_9X11IN	= 126;
NA_ARCH_A_9X12IN	= 127;
NA_LETTER_EXTRA_9o5X12IN	= 128;
NA_LEGAL_EXTRA_9o5X15IN	= 129;
NA_10X11_10X11IN	= 130;
NA_10X13_10X13IN	= 131;
NA_10X14_10X14IN	= 132;
NA_10X15_10X15IN	= 133;
NA_11X12_11X12IN	= 134;
NA_EDP_11X14IN	= 135;
NA_FANFOLD_US_11X14o875IN	= 136;
NA_11X15_11X15IN	= 137;
NA_LEDGER_11X17IN	= 138;
NA_EUR_EDP_12X14IN	= 139;
NA_ARCH_B_12X18IN	= 140;
NA_12X19_12X19IN	= 141;
NA_B_PLUS_12X19o17IN	= 142;
NA_SUPER_B_13X19IN	= 143;
NA_C_17X22IN	= 144;
NA_ARCH_C_18X24IN	= 145;
NA_D_22X34IN	= 146;
NA_ARCH_D_24X36IN	= 147;
ASME_F_28X40IN	= 148;
NA_WIDE_FORMAT_30X42IN	= 149;
NA_E_34X44IN	= 150;
NA_ARCH_E_36X48IN	= 151;
NA_F_44X68IN	= 152;

extensions 153 to 199;

// Chinese Standard Sheet Media Inch Sizes

ROC_16K_7o75X10o75IN	= 200;
ROC_8K_10o75X15o5IN	= 201;
PRC_32K_97X151MM	= 202;
PRC_1_102X165MM	= 203;
PRC_2_102X176MM	= 204;
PRC_4_110X208MM	= 205;
PRC_5_110X220MM	= 206;
PRC_8_120X309MM	= 207;
PRC_6_120X320MM	= 208;
PRC_3_125X176MM	= 209;
PRC_16K_146X215MM	= 210;
PRC_7_160X230MM	= 211;
OM_JUURO_KU_KAI_198X275MM	= 212;
OM_PA_KAI_267X389MM	= 213;
OM_DAI_PA_KAI_275X395MM	= 214;
PRC_10_324X458MM	= 215;

extensions

216 to 299;

// ISO Standard Sheet Media Sizes

ISO_A10_26X37MM	= 301;
ISO_A9_37X52MM	= 302;
ISO_A8_52X74MM	= 303;
ISO_A7_74X105MM	= 304;
ISO_A6_105X148MM	= 305;
ISO_A5_148X210MM	= 306;
ISO_A5_EXTRA_174X235MM	= 307;
ISO_A4_210X297MM	= 308;
ISO_A4_TAB_225X297MM	= 309;
ISO_A4_EXTRA_235o5X322o3MM	= 310;
ISO_A3_297X420MM	= 311;
ISO_A4X3_297X630MM	= 312;
ISO_A4X4_297X841MM	= 313;
ISO_A4X5_297X1051MM	= 314;
ISO_A4X6_297X1261MM	= 315;
ISO_A4X7_297X1471MM	= 316;
ISO_A4X8_297X1682MM	= 317;
ISO_A4X9_297X1892MM	= 318;
ISO_A3_EXTRA_322X445MM	= 319;
ISO_A2_420X594MM	= 320;
ISO_A3X3_420X891MM	= 321;
ISO_A3X4_420X1189MM	= 322;
ISO_A3X5_420X1486MM	= 323;
ISO_A3X6_420X1783MM	= 324;
ISO_A3X7_420X2080MM	= 325;
ISO_A1_594X841MM	= 326;
ISO_A2X3_594X1261MM	= 327;
ISO_A2X4_594X1682MM	= 328;
ISO_A2X5_594X2102MM	= 329;
ISO_A0_841X1189MM	= 330;
ISO_A1X3_841X1783MM	= 331;
ISO_A1X4_841X2378MM	= 332;
ISO_2A0_1189X1682MM	= 333;
ISO_A0X3_1189X2523MM	= 334;
ISO_B10_31X44MM	= 335;
ISO_B9_44X62MM	= 336;
ISO_B8_62X88MM	= 337;
ISO_B7_88X125MM	= 338;
ISO_B6_125X176MM	= 339;
ISO_B6C4_125X324MM	= 340;
ISO_B5_176X250MM	= 341;
ISO_B5_EXTRA_201X276MM	= 342;
ISO_B4_250X353MM	= 343;
ISO_B3_353X500MM	= 344;
ISO_B2_500X707MM	= 345;
ISO_B1_707X1000MM	= 346;

ISO_B0_1000X1414MM	= 347;
ISO_C10_28X40MM	= 348;
ISO_C9_40X57MM	= 349;
ISO_C8_57X81MM	= 350;
ISO_C7_81X114MM	= 351;
ISO_C7C6_81X162MM	= 352;
ISO_C6_114X162MM	= 353;
ISO_C6C5_114X229MM	= 354;
ISO_C5_162X229MM	= 355;
ISO_C4_229X324MM	= 356;
ISO_C3_324X458MM	= 357;
ISO_C2_458X648MM	= 358;
ISO_C1_648X917MM	= 359;
ISO_C0_917X1297MM	= 360;
ISO_DL_110X220MM	= 361;
ISO_RA2_430X610MM	= 362;
ISO_SRA2_450X640MM	= 363;
ISO_RA1_610X860MM	= 364;
ISO_SRA1_640X900MM	= 365;
ISO_RA0_860X1220MM	= 366;
ISO_SRA0_900X1280MM	= 367;

extensions 368 to 399;

// Japanese Standard Sheet Media Sizes

JIS_B10_32X45MM	= 400;
JIS_B9_45X64MM	= 401;
JIS_B8_64X91MM	= 402;
JIS_B7_91X128MM	= 403;
JIS_B6_128X182MM	= 404;
JIS_B5_182X257MM	= 405;
JIS_B4_257X364MM	= 406;
JIS_B3_364X515MM	= 407;
JIS_B2_515X728MM	= 408;
JIS_B1_728X1030MM	= 409;
JIS_B0_1030X1456MM	= 410;
JIS_EXEC_216X330MM	= 411;
JPN_CHOU4_90X205MM	= 412;
JPN_HAGAKI_100X148MM	= 413;
JPN_YOU4_105X235MM	= 414;
JPN_CHOU2_111o1X146MM	= 415;
JPN_CHOU3_120X235MM	= 416;
JPN_OUFUKU_148X200MM	= 417;
JPN_KAHU_240X322o1MM	= 418;
JPN_KAKU2_240X332MM	= 419;

extensions 420 to 499;

// Other Metric Standard Sheet Media Sizes

OM_SMALL_PHOTO_100X150MM	= 500;
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OM_ITALIAN_110X230MM	= 501;
OM_POSTFIX_114X229MM	= 502;
OM_LARGE_PHOTO_200X300MM	= 503;
OM_FOLIO_210X330MM	= 504;
OM_FOLIO_SP_215X315MM	= 505;
OM_INVITE_220X220MM	= 506;
extensions	507 to 599;

```
enum MediaType {
CUSTOM = 0;
DEFAULT = 1;
UNKNOWN = 2;
STATIONERY = 3;
STATIONERY_COATED = 4;
STATIONERY_INKJET = 5;
STATIONERY_PREPRINTED = 6;
STATIONERY_LETTERHEAD = 7;
STATIONERY_PREPUNCHED = 8;
STATIONERY_FINE = 9;
STATIONERY_HEAVYWEIGHT = 10;
STATIONERY_LIGHTWEIGHT = 11;
TRANSPARENCY = 12;
ENVELOPE = 13;
ENVELOPE_PLAIN = 14;
ENVELOPE_WINDOW = 15;
CONTINUOUS = 16;
CONTINUOUS_LONG = 17;
CONTINUOUS_SHORT = 18;
TAB_STOCK = 19;
PRE_CUT_TABS = 20;
FULL_CUT_TABS = 21;
MULTI_PART_FORM = 22;
LABELS = 23;
MULTI_LAYER = 24;
SCREEN = 25;
SCREEN_PAGED = 26;
PHOTOGRAPHIC = 27;
PHOTOGRAPHIC_GLOSSY = 28;
PHOTOGRAPHIC_HIGH_GLOSS = 29;
PHOTOGRAPHIC_SEMI_GLOSS = 30;
PHOTOGRAPHIC_SATIN = 31;
PHOTOGRAPHIC_MATTE = 32;
PHOTOGRAPHIC_FILM = 33;
BACK_PRINT_FILM = 34;
CARDSTOCK = 35;
ROLL = 36;
}
```

extensions

37 to 199;

}

message MediaSource {

CUSTOM	=	0;
DEFAULT	=	1;
UNKNOWN	=	2;
ALTERNATE	=	3;
ALTERNATE_ROLL	=	4;
AUTO	=	5;
BOTTOM	=	6;
BY_PASS_TRAY	=	7;
CENTER	=	8;
DISC	=	9;
ENVELOPE	=	10;
HAGAKI	=	11;
LARGE_CAPACITY	=	12;
LEFT	=	13;
MAIN	=	14;
MAIN_ROLL	=	15;
MANUAL	=	16;
MIDDLE	=	17;
PHOTO	=	18;
REAR	=	19;
RIGHT	=	20;
ROLL_1	=	21;
ROLL_2	=	22;
ROLL_3	=	23;
ROLL_4	=	24;
ROLL_5	=	25;
ROLL_6	=	26;
ROLL_7	=	27;
ROLL_8	=	28;
ROLL_9	=	20;
ROLL_10	=	30;
SIDE	=	31;
TOP	=	32;
TRAY_1	=	33;
TRAY_2	=	34;
TRAY_3	=	35;
TRAY_4	=	36;
TRAY_5	=	37;
TRAY_6	=	38;
TRAY_7	=	39;
TRAY_8	=	40;
TRAY_9	=	41;
TRAY_10	=	42;
TRAY_11	=	43;
TRAY_12	=	44;

	<pre> TRAY_13 = 45; TRAY_14 = 46; TRAY_15 = 47; TRAY_16 = 48; TRAY_17 = 49; TRAY_18 = 50; TRAY_19 = 51; TRAY_20 = 52; extensions 53 to 199; } </pre>

<pre> message PrinterTicketSection { optional ColorTicketItem color = 1; optional DuplexTicketItem duplex = 2; optional PageOrientationTicketItem page_orientation = 3; optional CopiesTicketItem copies = 4; optional MarginsTicketItem margins = 5; optional DpiTicketItem dpi = 6; optional FitToPageTicketItem fit_to_page = 7; optional PageRangeTicketItem page_range = 8; optional MediaSizeTicketItem media_size = 9; optional CollateTicketItem collate = 10; optional ReverseOrderTicketItem reverse_order = 11; } </pre>	<pre> message PrinterTicketSection { optional ContentType content_type = 1; optional PrintMode print_mode = 2; optional Color color = 3; optional Duplex duplex = 4; optional PageOrientation orientation = 5; optional int32 copies = 6; optional Margins margins = 7; optional Scale scaling = 8; repeated PageRange page_range = 9; optional Media media = 10; optional bool collate = 11; optional bool reverse_order = 12; extensions 100 to 199; } </pre>
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<pre> message PageRange { message Interval { required int32 start = 1; optional int32 end = 2; } repeated Interval default = 1; } </pre>	<pre> message PageRange { required int32 start = 1; optional int32 end = 2; } </pre>
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