

621.391

. .

,

ADSL

ADSL.

,

DMT,

ADSL.

DMT

DMT.

ADSL

,

:

xDSL,

ADSL,

CAP

DMT.

)

[1].

Internet,

ADSL –

,

,

,

(),

.

ADSL

(

),

,

(1:10 –
Internet),

,

,

,

, ADSL

,

[6]. ADSL-

ADSL-

,

– xDSL (Digital Subscriber Line).

,

3,4 ,
1,1 .

[5]:

1. « »
(downstream) –

;

xDSL,

ADSL.

2. « »

(upstream)

–

,

3.

,

ADSL (Asymmetric Digital Subscriber Line –
)

(POTS).

,

DSL (Digital Subscriber Line –
)

ADSL

ADSL.

–

xDSL.

DSL

HDSL (High data rate Digital Subscriber

Line –

),

VDSL (Very high data rate Digital Subscriber Line –

(

) , ADSL 1,5 / « » 8 / « » 640 / 1,5 / [3]. ADSL , « » . ADSL : 1. (8 /); 2. – ; 3. , ; 4. ADSL; 5. , ; 6. , , , ; 7. , ADSL 2 – CAP (Carrierless Amplitude Phase) DMT (Discrete Multi tone). CAP (Frequency Division Multiplexing – FDM). FDM , 2 « » , , « » . CAP, « » 2- , (Echo Cancellation), 90 « » « » (), – ADSL , QAM (Quadrature Amplitude Modulation). , (,) , , , . ADSL (FDM) – , : () , 0...4 . , ADSL 3,5-5,5 , 0,5 [2].

123

ADSL

DMT,

ADSL.

ADSL,

3. ITU-T Recommendation G.992.5. Asymmetric Digital Subscriber Line (ADSL) transceivers – Extended bandwidth ADSL2 (ADSL2+). – Geneva : ITU, 2004. – 92 p.

4. K. Maxwell. Asymmetric Digital Subscriber Line: Interim Technology for the Next Forty Years. - IEEE Communications Magazine, October 1996, pp. 100 - 106.

5. . . . ADSL/ADSL2+:

, 2007. – 384 . . (. . .).

6. . ADSL

. - Computerworld , 29

1997, . 26.

14.01.2014

1. ITU-T Recommendation G.992.1. Asymmetric digital subscriber line (ADSL) transceivers. – Geneva : ITU, 2000. – 256 p.

2. ITU-T Recommendation G.992.3. Asymmetric digital subscriber line transceivers 2 (ADSL2). – Geneva : ITU, 2010. – 404 p.

ADSL

ADSL.

DMT,

ADSL.

DMT

DMT.

:

xDSL,

ADSL
ADSL,

CAP DMT.

BASED ON TECHNOLOGY ADSL AS PROGRESSIVE INFORMATION TRANSFER TECHNOLOGY

V.V. Zhebka

Considered the characteristics and features of ADSL technology. Determined its advantages, which determine its popularity, both for research and implementation. Established and investigated encoding CAP and DMT, which are used in ADSL technology. The actuality of using encoding DMT at the present stage of technology development. Considered ADSL modems that use linear encoding DMT.

Keywords: technology xDSL, ADSL technology, coding CAP and DMT.